APPLICATION

FOR

UNITED STATES LETTERS PATENT

For

Remote Remonitoring

Appendix A

CERTIFICATE OF MAILING BY EXPRESS MAIL

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I hereby certify under 37 CFR §1.10 that this correspondence is bein deposited with the United States Postal Service as Express Mail Po Office to Addressee with sufficient postage on the date indicated belo and is addressed to the Commissioner for Patents, Washingto
D.C 20231. May 11, 2001
Date of Deposit Amantha Bell
Signature Samantha Bell
Typed or Printed Name of Percon Signing Certificate

```
SHOWSUM Windows v2.0.3.0 - Nov 9 2000 00:24:17
  Copyright (c) Automatos MCMXCIX - MM. All rights reserved.
  Opening file "pwc 20010118 0000 w4.sum"
  Total records: 24
  --Header-----
  MS Windows NT Server ver 4.0.1381 (sp 6.0) Service
  Sysver:
Pack 6

CustomerID: 05500100011513

MachineID: 90A3000000052

CompName: SAPDTI

HostName: sapdti

IPaddress: 192.168.1.149

Processor: x86 Family 6 Model 7 Stepping 2

ProcessorSpeed: 497 (MHz)

ProcessorIdent: GenuineIntel

TotalProcessors: 2

ActiveProcessors: 2

TotalMemory: 1047976 (KB)

PageSize: 4096 (B)

RegistrySizeLimit: -1 (B)

CurrentRegistrySize: 8032256 (B)
  Pack 6
 CurrentRegistrySize: 8032256 (B)
CurrentSyslogSize: 720984 (B)
BiosVersion: IBM BIOS Ver 7.0
BiosDate: 01/29/99
SystemIdentifier: AT/AT COMPATIBLE
SystemDir: C:\WINNT\System32
WindowsDir: C:\WINNT
LastBootMode: Normal
BootTime: Wed Jan 10 12:07:06 2001
Tzname0: E. South America Standard Time
Tzname1: E. South America Daylight Time
Locale: C
  CurrentRegistrySize: 8032256 (B)
  Locale:
                             С
  --Timestamp----- (Record 1) -----
  Wed Jan 17 23:09:00 2001
  --VMstat-----
  Processors: 2
     Interval: 3,599,967,900 (us)
  usr: 5.18% sys: 0.62% idle: 188.37%
  queue: 0 freepte: 39590
  pi: 1.53/s po: 2.29/s
  --IOstat------
  Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c)
  W(c) Q S
```

0 35CB34EC 1008 0 0 3,600		4,220,928	526.3	6 719.	.01 2354.61	990
1 CE2EE96C 3	35,814,400	48,538,624	2362.1	3 1541.	0.00	4937
2 CE1F98E1 677 0 0 8,882	2,187,264	10,772,480	189.3	1 8693.	.15 0.00	265
3 CE2EE96D 14 0 0 3,600,0	32,768	647,168	3.6	8 15.	88 3580.42	4
FSstat						
MountPoint VolNum	PhysDrv	Type	Fr	ee(KB)	Total(KB)	%free
C:\pagefile.sys 631AF993 2		PagingFile		128	2,048	6.25%
D:\pagefile.sys B5D97A0C 3000		PagingFile	2,3	78,916	3,072,000	77.44%
H:\pagefile.sys 00D37BF0 180		PagingFile		344	184,320	0.19%
C:\ B8BA90A3 0	0	NTFS	1,0	99,205	4,192,492	26.22%
D:\	1	NTFS	1	21,252	12,129,484	1.00%
6470EC21 0 E:\	2	NTFS	3.1	30,168	35,540,408	8.81%
E8E20702 0						
F:\ A891FC02 0	3	NTFS	5	59 , 972	1,198,060	46.74%
H:\ 5CDA4CC9 0	0	NTFS		21,314	208,025	10.25%
Network T S MTU	 000000	0 0			ice Loopback int	erface
	00000	0 0 0,046,875	0 0	AMD PCN	NET Family Et	hernet
TopTen Interval: ActiveCPUs: TotalProcesses: TotalThreads: TotalIO: TotalHandles:	3,600,078,1 2	25 (us)		-	· 	
CPU absolute				-		
Idle disp+work sqlservr	153 7	2,953 1	Sys T 1,391 1,672 2,125		.ds 0 555 947	
disp+work	299 2	9,078	3,188	4 1	.77	
disp+work disp+work	267	8,860 i	1,047 640		.66 273	
System perfwcol	2	0	7 , 375	35 10)33 71	
disp+work	270		4,547 297		.74	
inetinfo			2,407	21 3	342	
CPU group						

```
User Sys Thrds Hlds
Idle 0 6,781,391 2 0
disp+work 288,766 17,938 82 3877
sqlservr 79,922 12,125 41 947
System 0 7,375 35 1033
perfwcol 1,281 4,547 2 71
inetinfo 2,625 2,407 21 342
sqlagent 500 47 8 91
saposcol 172 265 4 77
SERVICES 63 93 20 285
msdtc 16 31 21 110
 MEM absolute-----
                    PID Private Shared sqlservr 153 834,699,264 disp+work 257 53,698,560 0
                                                                                                                                     0
                                                     267 26,587,136
                    disp+work
                                                                                                                                   0
                  disp+work disp+w
 MEM group------
                      Private Shared sqlservr 834,699,264
                   disp+work 176,537,600
                                 mmc 4,349,952
                                   gwrd 2,596,864
               sqlagent 2,260,992
perfwcol 1,658,880
msg_server 1,495,040
SERVICES 1,433,600
                                                                                                                 0
                                                                                                               0
                                                                                                                 0
                                                                                                                0
                      EXPLORER 1,413,120
                                                                                                                0
                      sqlmangr 1,409,024
IO absolute-----
                                                    PID IO
IO group-----
                                                          IO
 --Timestamp----- (Record 2) -----
Thu Jan 18 00:09:00 2001
--VMstat------
Processors: 2
      Interval: 3,599,961,300 (us)
usr: 4.95% sys: 0.59% idle: 188.90%
queue: 0 freepte: 39590
pi: 1.14/s po: 2.56/s
--IOstat------
Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c) W(c) Q S
 0 35CB34EC 3,325,952 4,095,488 360.24 680.17 2559.57 738
976 0 0 3,600,000,000
```

```
1 CE2EE96C 13,614,080 49,569,792 1213.47 1404.73 981.79 3098
1571 0 0 3,600,000,000
 2 CE1F98E1 802,816 131,072 80.39 4.43 3515.17 98
1 0 0 3,600,000,000
 3 CE2EE96D 0 552,960 0.00 10.96 3589.03 0
9 0 0 3,600,000,000
--FSstat-----
MountPoint PhysDrv Type Free(KB) Total(KB) %free
VolNum
                 -----
C:\pagefile.sys PagingFile 116 2,048 5.66%
631AF993 2
                         PagingFile 2,367,696 3,072,000 77.07%
D:\pagefile.sys
B5D97A0C 3000
                     PagingFile
H:\pagefile.sys
                                                  136 184,320 0.07%
00D37BF0 180
                   0 NTFS 1,099,109 4,192,492 26.22%
C:\
B8BA90A3 0
                  1 NTFS
D:\
                                                   121,172 12,129,484 1.00%
6470EC21 0
                  2 NTFS 3,130,168 35,540,408 8.81%
E:\
E8E20702 0
                   3 NTFS 559,972 1,198,060 46.74%
F:\
A891FC02 0
                    0 NTFS
H:\
                                                    21,314 208,025 10.25%
5CDA4CC9 0
--Network-----
T S MTU Speed RX-Kb/s TX-Kb/s RXe TXe Interface
24 1 1500 10000000 0 0 0 0 MS TCP Loopback interface [None] 3,599,984,375 6 1 1500 10000000 0 0 0 0 AMD PCNET Family Ethernet
Adapter [0004AC4CE34D] 3,599,984,375
--TopTen-----
Interval: 3,599,953,125 (us)
ActiveCPUs: 2
TotalProcesses: 50
TotalThreads: 330 TotalIO: 0
TotalHandles: 8458

        PID
        User
        Sys Thrds
        Hlds

        Idle
        0
        0
        6,800,546
        2
        0

        disp+work
        257
        224,547
        10,875
        4
        655

        sqlservr
        153
        75,000
        11,312
        43
        961

        disp+work
        299
        28,797
        2,843
        4
        177

        disp+work
        323
        7,922
        1,032
        4
        166

        disp+work
        267
        6,375
        875
        4
        275

        System
        2
        0
        7,156
        35
        1033

        perfwcol
        179
        1,031
        4,625
        2
        71

        disp+work
        270
        5,109
        375
        4
        174

        disp+work
        356
        3,266
        328
        4
        163

CPU absolute-----
CPU group-----
      User Sys Thrds Hlds
Idle 0 6,800,546 2 0
disp+work 278,423 16,908 82 3879
```

```
      sqlservr
      75,000
      11,312
      43
      961

      System
      0
      7,156
      35
      1033

      perfwcol
      1,031
      4,625
      2
      71

      inetinfo
      1,797
      1,718
      21
      342

      sqlagent
      375
      94
      9
      98

      saposcol
      140
      172
      4
      77

      SERVICES
      47
      125
      20
      285

      LSASS
      31
      15
      12
      103

MEM absolute-----
          PID Private Shared sqlservr 153 839,528,448 0 disp+work 257 40,382,464 0 disp+work 267 24,035,328 0 disp+work 323 15,040,512 0 disp+work 330 12,075,008 0 disp+work 259 11,649,024 0 disp+work 290 8,265,728 0 disp+work 254 7,925,760 0 disp+work 299 7,815,168 0 disp+work 362 6,918,144 0
MEM group-----
          Private Shared sqlservr 839,528,448
        sqiservr 839,528,448
disp+work 159,154,176
    mmc 4,456,448
sqlagent 2,351,104
    gwrd 1,716,224
perfwcol 1,662,976
msg_server 1,527,808
SERVICES 1,466,368
saposcol 1,413,120
sqlmangr 1,409,024
IO absolute----
                            PID IO
IO group-----
                             IO
--Timestamp----- (Record 3) -----
Thu Jan 18 01:09:00 2001
--VMstat-----
Processors: 2
   Interval: 3,613,164,500 (us)
usr: 6.57% sys: 0.77% idle: 184.56%
queue: 0 freepte: 39590
pi: 6.27/s po: 3.25/s
--IOstat-----
Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c) W(c) Q S
 0 35CB34EC 10,611,712 5,949,440 1730.99 966.24 902.81 2504
1284 0 0 3,600,046,875
 1 CE2EE96C 81,314,304 57,608,192 8444.62 1914.87 0.00 19382
1615 0 0 10,359,496,492
  2 CE1F98E1 1,184,382,976 15,892,48030145.99 13504.57 0.00 46435
```

1154 2 0 43,650,568,894 3 CE2EE96D 143,171,584 206,843,904 3150.72 6055.04 0.00 2196 3198 0 0 9,205,776,116

3170 0 0 7,20	5,770,110				
FSstat MountPoint VolNum		Type	Free(KB)	Total(KB)	 %free
C:\pagefile.sys 631AF993 2		PagingFile	128	2,048	6.25%
D:\pagefile.sys B5D97A0C 3000		PagingFile	2,443,288	3,072,000	79.53%
H:\pagefile.sys		PagingFile	4,780	184,320	2.59%
C:\ B8BA90A3 0	0	NTFS	1,099,109	4,192,492	26.22%
D:\ 6470EC21 0	1	NTFS	121,104	12,129,484	1.00%
E:\ E8E20702 0	2	NTFS	3,130,168	35,540,408	8.81%
F:\ A891FC02 0	3	NTFS	559 , 972	1,198,060	46.74%
H:∖ 5CDA4CC9 0	0	NTFS	21,314	208,025	10.25%
Network T S MTU					
					
24 1 1500 10 [None] 3,600,28	1,250			Loopback int	
6 1 1500 10 Adapter [0004AC	000000 4CE34D] 3,60		0 AMD PC	NET Family Et	hernet
TopTen					
<pre>Interval: ActiveCPUs:</pre>	3,600,375,0 2	00 (us)			
TotalProcesses:	50				
TotalThreads: TotalIO:	330				
TotalHandles:					
CPU absolute					
Talla	PID	User S	ys Thrds H		
Idle disp+work	0 257 23	0 6,668,7 4,953 10,7		0 655	
sqlservr	153 18	1,593 18,5	00 43	966	
disp+work disp+work		8,922 2,7 7,812 1,0		177 166	
System	2	0 7,7	97 35 1	033	
disp+work		6,500 1,0	00 4	279	
perfwcol disp+work		1,000 4,7 5,063 2		71 174	
inetinfo		2,500 2,5		342	
CPU group					
 	User	Sys Thro			
Idle disp+work	0 289 , 298	6,668,766 16,843	2 0 32 3883		
sqlservr	181,593		43 966		
System	1 000		35 1033		
perfwcol	1,000	4,765	2 71		

```
inetinfo 2,500 2,563 21 342 sqlagent 641 62 10 104 saposcol 125 188 4 77 SERVICES 47 94 20 285 msdtc 47 63 21 110
MEM absolute-----
                   PID Private Shared
        sqlservr 153 912,257,024 0
       disp+work 257 31,469,568 disp+work 267 19,525,632 disp+work 323 12,640,256 disp+work 259 11,120,640 disp+work 296 8,568,832 disp+work 254 7,897,088 disp+work 266,914,048 disp+work 299 6,139,904
                                                0
     Private Shared
sqlservr 912,257,024 0
disp+work 139,837,440 0
mmc 4,276,224 0
sqlagent 2,416,640 0
perfwcol 1,658,880 0
gwrd 1,626,112 0
msg_server 1,601,536 0
SERVICES 1,437,696 0
saposcol 1,409,024 0
sqlmangr 1,409,024 0
MEM group-----
IO absolute-----
                   PID IO
IO group-----
--Timestamp----- (Record 4) -----
Thu Jan 18 02:09:00 2001
--VMstat-----
Processors: 2
  Interval: 3,600,020,700 (us)
usr: 16.41% sys: 1.45% idle: 164.25%
queue: 1 freepte: 39590
pi: 4.92/s po: 3.11/s
--IOstat------
Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c) W(c) Q S
0 35CB34EC 15,378,432 8,090,112 2373.63 1164.08 62.26 3303
1334 0 0 3,599,984,375
 1 CE2EE96C 58,666,496 60,874,240 9851.18 3949.96 0.00 13140
2356 0 0 13,801,158,254
 2 CE1F98E1 9,642,704,896 17,563,648656950.62 18423.73 0.00
246238 1433 0 0 675,374,356,158
3 CE2EE96D 3,068,723,200 3,140,079,61674307.85 125170.79 0.00 47364 48041 2 0 199,478,646,369
```

FSstat					
MountPoint VolNum	PhysDrv	Type	Free(KB)		%free
C:\pagefile.sys		PagingFile	120	2,048	5.86%
631AF993 2 D:\pagefile.sys B5D97A0C 3000		PagingFile 2	2,457,168	3,072,000	79.99%
H:\pagefile.sys		PagingFile	5,004	184,320	2.71%
C:\ B8BA90A3 0	0	NTFS	1,099,109	4,192,492	26.22%
D:\ 6470EC21 0	1	NTFS	121,700	12,129,484	1.00%
E:\ E8E20702 0	2	NTFS	3,130,168	35,540,408	8.81%
F:\ A891FC02 0	3	NTFS	559 , 972	1,198,060	46.74%
H:\ 5CDA4CC9 0	0	NTFS	21,314	208,025	10.25%
Network		·			
T S MTU	Speed RX-Kb	o/s TX-Kb/s RXe 5	TXe Interfa	ace 	
24 1 1500 100 [None] 3,599,953 6 1 1500 100 Adapter [0004AC4	3,125 000000	0 0 0 0 0 0 99,953,125		Loopback int	
TopTenInterval: ActiveCPUs: TotalProcesses: TotalThreads: TotalIO: TotalHandles:	3,599,906,2 2 50 331 0	250 (us)			
CPU absolute					
Idle sqlservr disp+work disp+work disp+work System disp+work disp+work perfwcol disp+work	153 86 257 23 299 4 296 1 2 267 323	0 5,913,281 52,094 45,406	5 43 9 5 5 4 15 7 4 15 10 10 10 10 10 10 10 10 10 10 10 10 10	Lds 0 966 177 165 033 279 166 71	
CPU group		Occasion Miles and a			
Idle sqlservr disp+work System perfwcol inetinfo saposcol SERVICES	User 0 862,094 316,077 0 1,250 2,046 188 46	Sys Thrds 5,913,281 2 45,406 43 23,498 82 8,484 35 4,469 2 2,281 21 281 4	0 966 2 3884 5 1033 2 71 342 1 77		

### Sqlservr 153 892,227,584 0 ### sqlservr 153 892,227,584 0 ### disp+work 257 44,204,032 0 ### disp+work 323 13,299,712 0 ### disp+work 323 13,299,712 0 ### disp+work 259 11,141,120 0 ### disp+work 259 11,141,120 0 ### disp+work 362 6,922,240 0 ### disp+work 362 6,922,240 0 ### disp+work 362 6,922,240 0 ### disp+work 148,635,648 0 ### mmc 4,272,128 0 ### sqlservr 892,227,584 0 ### disp+work 148,635,648 0 ### mmc 4,272,128 0 ### sqlservr 892,241,640 0 ### perfect 1,495,040 0 ### sqlservr 892,041,466,368 0 ### sqlservr 1,495,040 0 ### sqls	msdtc gwrd		62 32	21 6	110 164		
### PID							
sqlservr 153 892,227,584 0 disp+work 267 13,819,904 0 disp+work 267 13,819,904 0 disp+work 323 13,299,712 0 disp+work 330 12,156,928 0 disp+work 259 11,141,120 0 disp+work 259 11,141,120 0 disp+work 256 9,084,928 0 disp+work 254 7,946,240 0 disp+work 352 6,922,240 0 disp+work 259 5,935,104 0 MEM group	MEM absolute			71 3			
disp+work 257 44,204,032 0 disp+work 267 13,819,904 0 disp+work 333 13,299,712 0 disp+work 259 11,141,120 0 disp+work 259 11,141,120 0 disp+work 256 9,084,928 0 disp+work 256 9,084,928 0 disp+work 266,922,240 0 disp+work 362 6,922,240 0 disp+work 362 6,922,240 0 disp+work 362 6,922,240 0 disp+work 362 6,922,240 0 MEM group	calconun						
disp+work 267 13,819,904 0 disp+work 323 13,299,712 0 disp+work 330 12,156,928 0 disp+work 259 11,141,120 0 disp+work 269 9,084,928 0 disp+work 254 7,946,240 0 disp+work 254 7,946,240 0 disp+work 262 6,922,240 0 disp+work 299 5,935,104 0 MEM group		155 692,22	032				
disp+work 323 13,299,712 0 disp+work 259 11,141,120 0 disp+work 296 9,084,928 0 disp+work 296 9,084,928 0 disp+work 296 9,084,928 0 disp+work 362 6,922,240 0 disp+work 362 6,922,240 0 disp+work 362 6,922,240 0 disp+work 362 6,922,240 0 disp+work 148,635,648 0 Private Shared sqlservr 892,227,584 0 disp+work 148,635,648 0 mmc 4,272,128 0 sqlagent 2,416,640 0 perfwcol 1,679,360 0 msg server 1,495,040 0 SERVICES 1,466,368 0 saposcol 1,413,120 0 sqlmangr 1,409,024 0 gwrd 1,380,352 0 IO absolute							
disp+work 330 12,156,928 0 disp+work 259 11,141,120 0 disp+work 296 9,084,928 0 disp+work 254 7,946,240 0 disp+work 254 7,946,240 0 disp+work 299 5,935,104 0 MEM group							
disp+work 296 9,084,928 0 disp+work 296 9,084,928 0 disp+work 254 7,946,240 0 disp+work 362 6,922,240 0 disp+work 299 5,935,104 0 MEM group							
disp+work 296 9,084,928 0 disp+work 362 6,922,240 0 disp+work 362 6,922,240 0 disp+work 299 5,935,104 0 MEM group			•				
disp+work 254 7,946,240 0 disp+work 362 6,922,240 0 disp+work 299 5,935,104 0 MEM group	-	· ·					
MEM group							
MEM group		362 6,922	,240				
MEM group————————————————————————————————————		299 5,935	,104				
Private Shared sqlservr 892,227,584 0 disp+work 148,635,648 0 mmc 4,272,128 0 sqlagent 2,416,640 0 perfwcol 1,679,360 0 msg server 1,495,040 0 sERVICES 1,466,368 0 saposcol 1,413,120 0 gwrd 1,380,352 0 IO absolute	<u>*</u>	,	•				
Private Shared sqlservr 892,227,584 0 disp+work 148,635,648 0 mmc 4,272,128 0 sqlagent 2,416,640 0 perfwcol 1,679,360 0 msg server 1,495,040 0 sERVICES 1,466,368 0 saposcol 1,413,120 0 gwrd 1,380,352 0 IO absolute	MEM group						
disp+work 148,635,648 0 mmc 4,272,128 0 sqlagent 2,416,640 0 perfwcol 1,679,360 0 msq server 1,495,040 0 SERVICES 1,466,368 0 saposcol 1,413,120 0 sqlmangr 1,409,024 0 gwrd 1,380,352 0 IO absolute TO Timestamp (Record 5) Thu Jan 18 03:09:00 2001 VMstat Processors: 2 Interval: 3,586,720,200 (us) usr: 7.35% sys: 0.81% idle: 184.39% queue: 0 freepte: 39590 pi: 5.67/s po: 4.12/s IOstat			Shared				
mmc 4,272,128 0 sqlagent 2,416,640 0 perfwcol 1,679,360 0 msg server 1,495,040 0 SERVICES 1,466,368 0 saposcol 1,413,120 0 sqlmangr 1,409,024 0 gwrd 1,380,352 0 IO absolute FID IO IO group Thu Jan 18 03:09:00 2001 VMstat	sqlservr	892,227,584	C)			
sqlagent 2,416,640 0 perfwcol 1,679,360 0 msg server 1,495,040 0 SERVICES 1,466,368 0 saposcol 1,413,120 0 sqlmangr 1,409,024 0 gwrd 1,380,352 0 IO absolute PID IO IO group	disp+work	148,635,648	C)			
perfwcol 1,679,360 0 msg_server 1,495,040 0 SERVICES 1,466,368 0 saposcol 1,413,120 0 sqlmangr 1,409,024 0 gwrd 1,380,352 0 IO absolute	mmc	4,272,128	0				
msg_server 1,495,040 0 SERVICES 1,466,368 0 saposcol 1,413,120 0 sqlmangr 1,409,024 0 gwrd 1,380,352 0 IO absolute PID IO IO group Thu Jan 18 03:09:00 2001 VMstat			0				
SERVICES 1,466,368 0 saposcol 1,413,120 0 sqlmangr 1,409,024 0 gwrd 1,380,352 0 IO absolute			0				
saposcol 1,413,120 0 sqlmangr 1,409,024 0 gwrd 1,380,352 0 IO absolute			0				
sqlmangr 1,409,024 0 gwrd 1,380,352 0 IO absolute							
gwrd 1,380,352 0 IO absolute							
PID IO IO Group							
PID IO IO group	gwra	1,380,352	0				
PID IO IO group	TO shaolute						
To group	10 absorute						
Thu Jan 18 03:09:00 2001 VMstat		PID IO					
Thu Jan 18 03:09:00 2001 VMstat	TO group	-					
Timestamp	10 910 ap						
Thu Jan 18 03:09:00 2001 VMstat							
Thu Jan 18 03:09:00 2001 VMstat							
VMstat	Timestamp	(Re	cord 5) -	-			
Processors: 2 Interval: 3,586,720,200 (us) usr: 7.35% sys: 0.81% idle: 184.39% queue: 0 freepte: 39590 pi: 5.67/s po: 4.12/s IOstat	Thu Jan 18 03:09	9:00 2001					
Processors: 2 Interval: 3,586,720,200 (us) usr: 7.35% sys: 0.81% idle: 184.39% queue: 0 freepte: 39590 pi: 5.67/s po: 4.12/s IOstat							
Interval: 3,586,720,200 (us) usr: 7.35% sys: 0.81% idle: 184.39% queue: 0 freepte: 39590 pi: 5.67/s po: 4.12/s IOstat					· 		
usr: 7.35% sys: 0.81% idle: 184.39% queue: 0 freepte: 39590 pi: 5.67/s po: 4.12/s IOstat							
queue: 0 freepte: 39590 pi: 5.67/s po: 4.12/s IOstat							
pi: 5.67/s po: 4.12/s IOstat			: 184.39%				
IOstat							
Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c) W(c) Q S 0 35CB34EC 16,280,576 8,559,616 2262.22 1233.07 104.69 3566 1599 0 0 3,600,000,000 1 CE2EE96C 69,891,584 68,056,064 7131.73 2272.67 0.00 15738 1823 0 0 9,404,409,396 2 CE1F98E1 2,161,000,448 20,086,784212505.37 36931.50 0.00 81196 1615 0 0 249,436,884,130 3 CE2EE96D 634,281,984 508,940,28815245.72 16985.07 0.00 9954 7795 0 0 32,230,802,363	p1: 5.6//s po: 4	1.12/S					
Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c) W(c) Q S 0 35CB34EC 16,280,576 8,559,616 2262.22 1233.07 104.69 3566 1599 0 0 3,600,000,000 1 CE2EE96C 69,891,584 68,056,064 7131.73 2272.67 0.00 15738 1823 0 0 9,404,409,396 2 CE1F98E1 2,161,000,448 20,086,784212505.37 36931.50 0.00 81196 1615 0 0 249,436,884,130 3 CE2EE96D 634,281,984 508,940,28815245.72 16985.07 0.00 9954 7795 0 0 32,230,802,363	TOat at						
W(c) Q S 0 35CB34EC 16,280,576 8,559,616 2262.22 1233.07 104.69 3566 1599 0 0 3,600,000,000 1 CE2EE96C 69,891,584 68,056,064 7131.73 2272.67 0.00 15738 1823 0 0 9,404,409,396 2 CE1F98E1 2,161,000,448 20,086,784212505.37 36931.50 0.00 81196 1615 0 0 249,436,884,130 3 CE2EE96D 634,281,984 508,940,28815245.72 16985.07 0.00 9954 7795 0 0 32,230,802,363							D (-)
0 35CB34EC 16,280,576 8,559,616 2262.22 1233.07 104.69 3566 1599 0 0 3,600,000,000 1 CE2EE96C 69,891,584 68,056,064 7131.73 2272.67 0.00 15738 1823 0 0 9,404,409,396 2 CE1F98E1 2,161,000,448 20,086,784212505.37 36931.50 0.00 81196 1615 0 0 249,436,884,130 3 CE2EE96D 634,281,984 508,940,28815245.72 16985.07 0.00 9954 7795 0 0 32,230,802,363	M(a) O C				write(t)	Idle(t)	R(C)
0 35CB34EC 16,280,576 8,559,616 2262.22 1233.07 104.69 3566 1599 0 0 3,600,000,000 1 CE2EE96C 69,891,584 68,056,064 7131.73 2272.67 0.00 15738 1823 0 0 9,404,409,396 2 CE1F98E1 2,161,000,448 20,086,784212505.37 36931.50 0.00 81196 1615 0 0 249,436,884,130 3 CE2EE96D 634,281,984 508,940,28815245.72 16985.07 0.00 9954 7795 0 0 32,230,802,363							
1599 0 0 3,600,000,000 1 CE2EE96C 69,891,584 68,056,064 7131.73 2272.67 0.00 15738 1823 0 0 9,404,409,396 2 CE1F98E1 2,161,000,448 20,086,784212505.37 36931.50 0.00 81196 1615 0 0 249,436,884,130 3 CE2EE96D 634,281,984 508,940,28815245.72 16985.07 0.00 9954 7795 0 0 32,230,802,363					1233 07	1 104 69	3566
1 CE2EE96C 69,891,584 68,056,064 7131.73 2272.67 0.00 15738 1823 0 0 9,404,409,396 2 CE1F98E1 2,161,000,448 20,086,784212505.37 36931.50 0.00 81196 1615 0 0 249,436,884,130 3 CE2EE96D 634,281,984 508,940,28815245.72 16985.07 0.00 9954 7795 0 0 32,230,802,363 FSstat			0,333,010	2202.22	. 1233.07	104.09	3366
1823 0 0 9,404,409,396 2 CE1F98E1 2,161,000,448 20,086,784212505.37 36931.50 0.00 81196 1615 0 0 249,436,884,130 3 CE2EE96D 634,281,984 508,940,28815245.72 16985.07 0.00 9954 7795 0 0 32,230,802,363FSstat			68 056 064	7131 73	2272 67	0.00	1573Ω
2 CE1F98E1 2,161,000,448 20,086,784212505.37 36931.50 0.00 81196 1615 0 0 249,436,884,130 3 CE2EE96D 634,281,984 508,940,28815245.72 16985.07 0.00 9954 7795 0 0 32,230,802,363FSstat			00,000,001	7131.73	2212.07	0.00	13730
1615 0 0 249,436,884,130 3 CE2EE96D 634,281,984 508,940,28815245.72 16985.07 0.00 9954 7795 0 0 32,230,802,363 FSstat			20.086.78	4212505	37 36931	50 0.0	0 81196
3 CE2EE96D 634,281,984 508,940,28815245.72 16985.07 0.00 9954 7795 0 0 32,230,802,363FSstat	1615 0 0 249.4	136,884,130	_0,000,70	-212000.	C, COJUL.	0.0	0 01170
7795 0 0 32,230,802,363FSstat			08,940,288	15245.72	16985.07	0.00	9954
FSstat				/ _			
MountPoint PhysDrv Type Free(KB) Total(KB) %free							
	MountPoint	PhysDrv '	Type	Fre	e(KB)	Total(KB)	%free

VolNum							
C:\pagefile.sys		PagingFile		12	4	2,048	6.05%
631AF993 2 D:\pagefile.sys B5D97A0C 3000		PagingFile	2,	451,00	4 3,	072,000	79.79%
H:\pagefile.sys		PagingFile		4,62	4	184,320	2.51%
C:\	0	NTFS	1,	099,10	94,	192,492	26.22%
B8BA90A3 0 D:\	1	NTFS		121,57	2 12,	129,484	1.00%
6470EC21 0 E:\	2	NTFS	3,	130,16	8 35,	540,408	8.81%
E8E20702 0 F:\	3	NTFS		559,97	2 1,	198,060	46.74%
A891FC02 0 H:\ 5CDA4CC9 0	0	NTFS		21,31	4	208,025	10.25%
Network T S MTU		o/s TX-Kb/s :	- RXe ТХ	Ke Inte	 rface		
24 1 1500 10		0 0	0	0 MS T	CP Loop	 back int	 erface
[None] 3,599,85 6 1 1500 10	9 , 375 000000	0 0	0	0 AMD	PCNET F	amily Et	hernet
Adapter [0004AC	4CE34D] 3,59	9,859,375				_	
TopTen Interval: ActiveCPUs: TotalProcesses: TotalThreads: TotalIO: TotalHandles:	3,599,812,5 2	000 (us)					
CPU absolute			-				
Idle sqlservr disp+work disp+work disp+work System disp+work perfwcol disp+work inetinfo	153 24 257 22 299 2 323 2 267 179 270	10,813 19,7,156 11,156	Sys 3,875 9,641 1,344 3,172 782 7,875 672 4,531 219 2,453	Thrds 2 43 4 4 4 35 4 2 21	Hlds 0 961 655 177 166 1033 281 71 174 342		
CPU group	User		Thrds	Hlds			
Idle disp+work sqlservr System perfwcol inetinfo saposcol sqlagent SERVICES gwrd	0 283,531 240,813 0 1,156 2,141 93 125 47 30	6,613,875 17,441 19,641 7,875 4,531 2,453 203 47 78 15	2 82 43 35 2 21 4 9 20 6	0 3887 961 1033 71 342 77 98 285 164			

```
MEM absolute-----
             PID Private Shared
     sqlservr 153 886,140,928 0
     disp+work 257 20,058,112
     disp+work 267 17,321,984
     disp+work 323 14,999,552
     disp+work 330 12,259,328
     disp+work 259 11,747,328
     disp+work 290 9,072,640
     disp+work 296 8,331,264
     disp+work 254 7,884,800
disp+work 299 7,135,232
   Private Shared
sqlservr 886,140,928 0
disp+work 137,338,880 0
mmc 4,341,760 0
sqlagent 2,351,104 0
perfwcol 1,650,688 0
SERVICES 1,626,112 0
msg_server 1,609,728 0
gwrd 1,515,520 0
saposcol 1,409,024 0
sqlmangr 1,409,024 0
MEM group-----
IO absolute-----
             PID IO
IO group-----
               IO
--Timestamp----- (Record 6) -----
Thu Jan 18 04:09:00 2001
--VMstat-----
Processors: 2
 Interval: 3,599,965,200 (us)
usr: 4.92% sys: 0.62% idle: 188.89%
queue: 0 freepte: 39590
pi: 2.39/s po: 2.48/s
--IOstat-----
Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c) W(c) Q S
0 35CB34EC 6,725,632 5,163,008 825.95 738.31 2035.73 1474
1072 0 0 3,600,000,000
1 CE2EE96C 28,791,808 46,677,504 2195.14 1316.68 88.16 6599
1425 0 0 3,600,000,000
2 CE1F98E1 9,363,456 8,192 1934.33 1.24 1664.42 582
1 0 0 3,600,000,000
3 CE2EE96D 409,600 954,368 49.38 32.33 3518.29 50
15 0 0 3,600,015,625
--FSstat-----
MountPoint PhysDrv Type Free(KB) Total(KB) %free
_____
                     PagingFile 124 2,048 6.05%
C:\pagefile.sys
```

631AF993 2							
D:\pagefile.sys		PagingFil	e 2	.444.78	0 3	3.072.00	0 79.58%
B5D97Ã0C 3000						, ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
H:\pagefile.sys 00D37BF0 180		PagingFil	.e	4,28	0	184,32	0 2.32%
C:\ B8BA90A3 0	0	NTFS	1	,099,10	9 4	4,192,49	2 26.22%
D:\	1	NTFS		121,50	8 12	2,129,48	4 1.00%
6470EC21 0 E:\	2	NTFS	3	,130,16	8 35	5,540,40	8 8.81%
E8E20702 0 F:\	3	NTFS		559.97	2	1,198,06	0 46.74%
A891FC02 0							
H:\ 5CDA4CC9 0	0	NTFS		21,31	4	208,02	5 10.25%
Network			. 				
T S MTU	Speed RX-Kb				rface		
24 1 1500 100	000000	0 (0	0 MS T	CP Loc	opback i	 nterface
[None] 3,599,984		0 (. 0	O AMD	ייייייייייייייייייייייייייייייייייייייי	Ford 3.	Ethornot
Adapter [0004AC4			0	U AMD	PCNET	ramity	Ethernet
TopTen							
Interval:	3,600,015,6						
ActiveCPUs:	2						
TotalProcesses: TotalThreads:	330						
TotalIO:	0						
	8468						
CPU absolute							
	PID	User		Thrds	Hlds		
Idle	0		00,328		0		
disp+work sqlservr			12,031 11,859				
disp+work	299 2	8,968	2,938	43	962 177		
disp+work disp+work	323	8,250	687	4	166		
disp+work		6,281	1,016	4			
System	2	0	7,000	35	1033		
disp+work		5,328	313	4	174		
perfwcol	179		4,500		71		
inetinfo	133	3,016	2,469	21	342		
CPU group							
T 41 -	User		Thrds	Hlds			
Idle	0	6,800,328		0			
disp+work	275 , 937		82	3889			
sqlservr System		11,859 7,000		962 1033			
perfwcol		4,500		71			
inetinfo	3,016	2,469		342			
sqlagent	610	2,403		98			
saposcol	125	109		77			
SERVICES	32	125		285			
msdtc	16	62		110			
MEM absolute	. 						
LIDII UNBOTALE		ivate	Shared				
sqlservr	153 880,4		()			
-	•						

```
disp+work
            257 17,899,520
    disp+work 267 16,699,392
    disp+work 323 14,749,696
    disp+work 330 12,406,784
    disp+work 259 11,264,000
    disp+work 299 10,256,384
    disp+work 296 8,351,744
    disp+work 254 7,884,800
    disp+work 362 6,930,432
MEM group-----
             Private Shared
     sqlservr 880,480,256 0
    disp+work 131,387,392
        mmc 4,341,760
     sqlagent 2,351,104
     perfwcol 1,658,880
    msg server 1,564,672
                          0
     SERVICES 1,441,792
                          0
     saposcol 1,413,120
     sqlmangr 1,409,024
EXPLORER 1,376,256
IO absolute----
            PID IO
IO group-----
             TO
--Timestamp----- (Record 7) -----
Thu Jan 18 05:09:00 2001
--VMstat-----
Processors: 2
Interval: 3,613,419,200 (us)
usr: 4.90% sys: 0.60% idle: 188.22%
queue: 0 freepte: 39590
pi: 1.73/s po: 2.27/s
--IOstat-----
Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c) W(c) O S
W(c) Q S
0 35CB34EC 5,115,904 4,850,176 596.42 750.39 2253.15 1179
1091 0 0 3,599,984,375
1 CE2EE96C 20,445,696 43,931,648 1792.79 1255.59 551.59 4631
1355 0 0 3,599,984,375
2 CE1F98E1 1,015,808 13,172,736 159.80 31218.14 0.00 124
1040 0 0 31,377,950,478
3 CE2EE96D 81,920
                    585,728 9.94 14.66 3575.38 10
13 0 0 3,599,984,375
MountPoint PhysDrv Type
                          Free(KB) Total(KB)
______
C:\pagefile.sys
                   PagingFile 124 2,048 6.05%
631AF993 2
D:\pagefile.sys
               PagingFile 2,432,956 3,072,000 79.20%
B5D97A0C 3000
```

H:\pagefile.sys		PagingFil	е	3,42	4	184,320	1.86%
00D37BF0 180 C:\	0	NTFS	1	,099,10	Δ	1 100 100	26.22%
B8BA90A3 0	O	NIFS	1	,099,10	9	4,192,492	20.228
D:\	1	NTFS		121,43	6 1	2,129,484	1.00%
6470EC21 0 E:\	2	NTFS	3	,130,16	8 3	5,540,408	8.81%
E8E20702 0							0.010
F:\ A891FC02 0	3	NTFS		559,97	2	1,198,060	46.74%
H:\	0	NTFS		21,31	4	208,025	10.25%
5CDA4CC9 0							
Network		-					
T S MTU	Speed RX-K	lb/s TX-Kb/s	RXe T	Xe Inte	rface		
24 1 1500 10	000000	0 0	0	 П МС Т		 opback int	 orfogo
[None] 3,599,96		0 0	O	0 M5 1	CF LO	ppoack inc	errace
	000000	0 0	0	0 AMD	PCNET	Family Et	hernet
Adapter [0004AC	4CE34D] 3,5	99,968,750					
TopTen							
	3,599,968,	750 (us)					
ActiveCPUs: TotalProcesses:	2 50						
TotalThreads:							
TotalIO:	0						
TotalHandles:	8470						
CPU absolute							
	PID	User	Sys	Thrds	Hlds		
Idle	0		01,407	2	0		
disp+work	290 2		11,938	4	171		
sqiservr	153		11,485	43	962		
disp+work		29,329	2,562	4	177		
disp+work System		7,812 0	922 7,281	4 35	166		
disp+work		5,890	578	35 4	1033 167		
disp+work		5,375	546	4	283		
perfwcol			4,297	2	71		
inetinfo	133	2,734	2,641	21	342		
CDII							
CPU group	- User	Svs	Thrds	Hlds			
Idle	0		2	0			
disp+work	274,592	17,359	82	3893			
sqlservr	75,297		43	962			
System	0	7,281	35	1033			
perfwcol	1,297	4,297	2	71			
inetinfo	2,734	2,641	21	342			
sqlagent	468	47	9	98			
saposcol	94	282	4	77			
SERVICES msdtc	15 0	140 47	20	285			
madec	O	4 /	21	110			
MEM absolute							
a~1 ~~~~			Shared				
sqlservr	153 867,		C)			
disp+work disp+work	257 18,3		0				
disp+work disp+work	323 15,8 290 15,0		0				
CTOD, MOT V	200 IO, 0	J,,0J0	U				

disp+work disp+work	330 12,52 267 11,50 296 9,94 254 7,88 299 7,63 356 7,04	1,568 9,184 0,704 9,040	0 0 0 0 0			
disp+work mmc sqlagent perfwcol msg_server SERVICES saposcol sqlmangr	Private 867,102,720 135,348,224 4,341,760 2,351,104 1,658,880	Shared 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				
IO absolute	PID IO					
IO group	10					
Timestamp Thu Jan 18 06:09VMstat Processors: 2 Interval: 3,58 usr: 5.38% sys: queue: 0 freepte pi: 2.49/s po: 2	:00 2001 	us) e: 188.76%				
IOstat Dk Signatur W(c) Q S					Idle(t)	R(c)
0 35CB34EC 1030 0 0 3,600 1 CE2EE96C 2 1389 0 0 3,634	,015,625 8,785,152					
2 CE1F98E1 3 3 0 0 46,030,7 3 CE2EE96D 41 0 0 3,599,9	83,870 1,794,048					
FSstat MountPoint VolNum	PhysDrv	Type	Free	e(KB)	Total(KB)	
C:\pagefile.sys		PagingFile				
631AF993 2 D:\pagefile.sys B5D97A0C 3000		PagingFile				
H:\pagefile.sys 00D37BF0 180		PagingFile	3	3,440	184,320	1.87%
C:\	0	NTFS	1,099	,109	4,192,492	26.22%

```
B8BA90A3 0
                      1 NTFS
D:\
                                                             120,348
                                                                          12,129,484 0.99%
6470EC21 0
                      2 NTFS
E:\
                                                        3,130,168 35,540,408 8.81%
E8E20702 0
                       3
F:\
                                        NTFS
                                                               559,972 1,198,060 46.74%
A891FC02 0
                        0
H:\
                                        NTFS
                                                              21,314 208,025 10.25%
5CDA4CC9 0
--Network-----
 T S MTU Speed RX-Kb/s TX-Kb/s RXe TXe Interface
24 1 1500 10000000 0 0 0 MS TCP Loopback interface
[None] 3,600,000,000
6 1 1500 10000000 0 0 0 AMD PCNET Family Ethernet
Adapter [0004AC4CE34D] 3,600,000,000
--TopTen-----
Interval: 3,600,000,000 (us)
ActiveCPUs: 2
TotalProcesses: 50
TotalThreads: 329
TotalIO: 0
TotalHandles: 8476

        PID
        User
        Sys Thrds
        Hlds

        Idle
        0
        0
        6,770,109
        2
        0

        disp+work
        290
        215,953
        11,391
        4
        171

        sqlservr
        153
        88,062
        11,984
        43
        962

        disp+work
        299
        35,000
        3,016
        4
        179

        disp+work
        296
        17,860
        750
        4
        167

        disp+work
        356
        9,328
        406
        4
        163

        disp+work
        323
        7,641
        750
        4
        166

        disp+work
        257
        6,703
        906
        4
        663

        System
        2
        0
        6,438
        35
        1033

        perfwcol
        179
        1,234
        4,344
        2
        71

CPU absolute-----
        CPU group-----
MEM absolute-----
                   PID Private Shared
         sqlservr 153 869,076,992 0
        sqlservr 133 003,1
disp+work 257 19,746,816
        disp+work 323 15,761,408
        disp+work 290 15,204,352
        disp+work 330 12,673,024
        disp+work 267 11,780,096
        disp+work 296 10,698,752
```

disp+work	299 9,35 356 8,24 254 7,93	19,344	0 0 0			
MEM group	. 					
sqlservr disp+work mmc sqlagent gwrd perfwcol msg_server SERVICES saposcol	Private 869,076,992 137,785,344 4,354,048 2,351,104 1,847,296 1,654,784	Shared 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				
Sqrmangr	1,400,024	0				
IO absolute	PID IC	-				
IO group	IO					
Timestamp	(F	Record 9) -				
Thu Jan 18 07:09	:00 2001					
Processors: 2 Interval: 3,61 usr: 6.07% sys:	3,594,500 ((us)		· 		
queue: 0 freepte pi: 17.57/s po:	: 39385					
queue: 0 freepte pi: 17.57/s po:	: 39385 10.39/s					
queue: 0 freepte	: 39385 10.39/s					 R(c)
queue: 0 freepte pi: 17.57/s po: IOstat Dk Signatur	: 39385 10.39/s Read(B)	Write(B)	Read(t)	Write(t)	Idle(t)	
queue: 0 freepte pi: 17.57/s po: IOstat	Read(B) 3,363,840 ,299,247 5,200,640 5,667,222	Write(B) 19,882,496 156,621,312	Read(t) 6809.32 25389.07	Write(t) 2847.97 4996.59	Idle(t) 0.00 0.00	9330 51229
queue: 0 freepte pi: 17.57/s po: IOstat	: 39385 10.39/s Read(B) 3,363,840 ,299,247 5,200,640 5,667,222 91,056,896	Write(B) 19,882,496 156,621,312	Read(t) 6809.32 25389.07	Write(t) 2847.97 4996.59	Idle(t) 0.00 0.00	9330 51229
queue: 0 freepte pi: 17.57/s po: IOstat	: 39385 10.39/s Read(B) 3,363,840 ,299,247 5,200,640 5,667,222 91,056,896 ,963,029 548,864	Write(B) 19,882,496 156,621,312	Read(t) 6809.32 25389.07 242311.94	Write(t) 2847.97 4996.59 13944.01	Idle(t) 0.00 0.00 0.00	9330 51229 9808
queue: 0 freepte pi: 17.57/s po: IOstat	: 39385 10.39/s Read(B) 3,363,840 ,299,247 5,200,640 5,667,222 91,056,896 ,963,029 548,864 40,625	Write(B) 19,882,496 156,621,312: 8,364,03: 1,438,720	Read(t) 6809.32 25389.07 242311.94 34.90	Write(t) 2847.97 4996.59 13944.01 42.59	Idle(t) 0.00 0.00 0.00 3523.14	9330 51229 9808 32
queue: 0 freepte pi: 17.57/s po: IOstat	: 39385 10.39/s Read(B) 3,363,840 ,299,247 5,200,640 5,667,222 91,056,896 ,963,029 548,864 40,625 PhysDrv	Write(B) 19,882,496 156,621,3123 8,364,033 1,438,720 Type	Read(t) 6809.32 25389.07 242311.94 34.90 Free	Write(t) 2847.97 4996.59 13944.01 42.59	Idle(t) 0.00 0.00 3523.14 Cotal(KB)	9330 51229 9808 32 %free
queue: 0 freepte pi: 17.57/s po: IOstat	: 39385 10.39/s Read(B) 3,363,840 ,299,247 5,200,640 5,667,222 91,056,896 ,963,029 548,864 40,625 PhysDrv	Write(B) 19,882,496 156,621,3123 8,364,033 1,438,720 Type	Read(t) 6809.32 25389.07 242311.94 34.90 Free	Write(t) 2847.97 4996.59 13944.01 42.59	Idle(t) 0.00 0.00 3523.14 Cotal(KB)	9330 51229 9808 32 %free
queue: 0 freepte pi: 17.57/s po: IOstat	: 39385 10.39/s Read(B) 3,363,840 ,299,247 5,200,640 5,667,222 91,056,896 ,963,029 548,864 40,625 PhysDrv	Write(B) 19,882,496 156,621,3122 8,364,032 1,438,720 Type	Read(t) 6809.32 25389.07 242311.94 34.90 Free	Write(t) 2847.97 4996.59 13944.01 42.59 (KB) 120	Idle(t) 0.00 0.00 3523.14 Cotal(KB) 2,048	9330 51229 9808 32 %free 5.86%
queue: 0 freepte pi: 17.57/s po: IOstat	: 39385 10.39/s Read(B) 3,363,840 ,299,247 5,200,640 5,667,222 91,056,896 ,963,029 548,864 40,625 PhysDrv	Write(B) 19,882,496 156,621,3123 8,364,033 1,438,720 Type PagingFile	Read(t) 6809.32 25389.07 242311.94 34.90 Free 2,436	Write(t) 2847.97 4996.59 13944.01 42.59 (KB) 120	Idle(t) 0.00 0.00 3523.14 Cotal(KB) 2,048	9330 51229 9808 32 %free 5.86% 79.32%
queue: 0 freepte pi: 17.57/s po: IOstat	: 39385 10.39/s Read(B) 3,363,840 ,299,247 5,200,640 5,667,222 91,056,896 ,963,029 548,864 40,625 PhysDrv	Write(B) 19,882,496 156,621,3123 8,364,033 1,438,720 Type PagingFile PagingFile	Read(t) 6809.32 25389.07 242311.94 34.90 Free 2,436	Write(t) 2847.97 4996.59 13944.01 42.59 (KB) 120 3,856 3,576	Idle(t) 0.00 0.00 3523.14 Cotal(KB) 2,048	9330 51229 9808 32 %free 5.86% 79.32% 1.94%

```
2 NTFS
E:\
                                                  3,130,168 35,540,408 8.81%
E8E20702 0
F:\
                    3
                                  NTFS
                                                    559,972 1,198,060 46.74%
A891FC02 0
                     0
                                                                   208,025 10.25%
                                  NTFS
                                                     21,314
5CDA4CC9 0
--Network-----
T S MTU Speed RX-Kb/s TX-Kb/s RXe TXe Interface
24 1 1500 10000000 0 0 0 0 MS TCP Loopback interface
[None] 3,600,671,875
6 1 1500 10000000 0 4 0 0 AMD PCNET Family Ethernet
Adapter [0004AC4CE34D] 3,600,671,875
--TopTen-----
Interval: 3,600,640,625 (us) ActiveCPUs: 2
TotalProcesses: 50
TotalThreads: 331
TotalIO: 0
TotalHandles: 8520
CPU absolute-----
      PID User Sys Thrds Hlds

Idle 0 0 6,673,922 2 0

disp+work 290 223,719 12,250 4 171

sqlservr 153 102,032 17,813 43 965

disp+work 257 31,563 5,360 4 663

disp+work 299 29,625 2,844 4 179

System 2 0 12,906 35 1045

disp+work 267 10,531 2,109 4 285

disp+work 270 9,547 1,797 4 176

disp+work 323 7,844 984 4 166

mmc 172 2,640 4,562 4 81
       User Sys Thrds Hlds
Idle 0 6,673,922 2 0
disp+work 330,985 28,939 82 3927
sqlservr 102,032 17,813 43 965
System 0 12,906 35 1045
mmc 2,640 4,562 4 81
perfwcol 1,172 4,484 2 71
inetinfo 1,578 1,657 21 342
sqlagent 407 109 9 98
saposcol 125 328 4 77
EXPLORER 125 235 4 55
CPU group-----
MEM absolute-----
        PID Private Shared sqlservr 153 810,029,056 0
                                            0
       disp+work 257 94,199,808
disp+work 267 72,314,880
                                                   Ω
       disp+work 270 36,696,064
       disp+work 274 17,391,616
       disp+work 259 14,159,872
       disp+work 330 12,705,792
       disp+work 305 12,636,160
       disp+work 290 12,021,760
       disp+work 323 11,522,048
```

disp+work mmc sqlagent gwrd perfwcol msg_server SERVICES saposcol	Private 810,029,056 321,236,992	Shared 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				
IO absolute	PID IC					
IO group	IO					
Timestamp Thu Jan 18 08:09		Record 10)				
VMstat	36,380,300 1.82% idl 2: 39300	(us)			·	
IOstat Dk Signatur W(c) Q S	Read(B)	Write(B)	Read(t) N			R(c)
0 35CB34EC 76567 0 0 16,466 1 CE2EE96C 36 9086 0 0 45,666 2 CE1F98E1 9,24177 0 0 244,53 CE2EE96D 25 0 0 3,599,46	70,411,776 59,277,106 58,412,672 52,754,261 248,825,344 571,785,623 16,384		11042.64 34606.29 3	5426.62 11056.46 150154.9	0.00 0.00 6 0.0	87938 0 12013
VolNum	PhysDrv	Type	Free	(KB) I	otal(KB)	 %free
C:\pagefile.sys	·	PagingFile		116	2,048	 5.66%
D:\pagefile.sys B5D97A0C 3000		PagingFile	2,444,	,208 3	,072,000	79.56%
H:\pagefile.sys 00D37BF0 180		PagingFile	3,	860	184,320	2.09%
C:\ B8BA90A3 0	0	NTFS	1,099,	,109 4	,192,492	26.22%
D:\ 6470EC21 0	1	NTFS	119,	.964 12	,129,484	0.99%
E:\ E8E20702 0	2	NTFS	3,130,	.168 35	,540,408	8.81%
F:\	3	NTFS	559,	.972 1	,198,060	46.74%

A891FC02 0 0 NTFS 21,314 208,025 10.25% H:\ 5CDA4CC9 0 --Network-----T S MTU Speed RX-Kb/s TX-Kb/s RXe TXe Interface 24 1 1500 10000000 0 0 0 MS TCP Loopback interface [None] 3,599,453,125 6 1 1500 10000000 1 12 0 0 AMD PCNET Family Ethernet Adapter [0004AC4CE34D] 3,599,453,125 --TopTen-----Interval: 3,599,468,750 (us) ActiveCPUs: 2 TotalProcesses: 50 TotalThreads: 330 TotalIO: 0 TotalHandles: 8528 CPU absolute-----CPU group-----MEM absolute-----PID Private Shared sqlservr 153 740,327,424 0 disp+work 257 138,932,224 0 disp+work 267 122,298,368 disp+work 270 54,812,672 disp+work 259 54,771,712 disp+work 274 27,979,776 disp+work 323 13,533,184 disp+work 305 13,168,640 disp+work 330 12,632,064 disp+work 290 11,563,008 MEM group-----Private Shared

```
sqlservr 740,327,424
    disp+work 496,574,464
        mmc 9,650,176
     sqlagent 2,371,584
        gwrd 1,613,824
     perfwcol 1,609,728
     SERVICES 1,519,616
   msg server 1,499,136
     sqlmangr 1,409,024
       msdtc 1,363,968
IO absolute-----
            PID IO
IO group-----
             IO
--Timestamp----- (Record 11) -----
Thu Jan 18 09:09:00 2001
--VMstat------
Processors: 2
 Interval: 3,613,662,000 (us)
usr: 11.77% sys: 1.96% idle: 171.76%
queue: 0 freepte: 39496
pi: 24.67/s po: 23.22/s
--IOstat-----
Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c)
W(c) Q S
0 35CB34EC 59,459,072 30,252,032 8504.62 4400.66 0.00 13568
6139 0 0 12,905,292,039
1 CE2EE96C 331,708,928 360,704,51225091.91 11899.00 0.00 71749
11253 0 0 36,990,920,067
2 CE1F98E1 2,185,641,984 157,745,152112235.35 144613.04 0.00
15216 5819 0 0 256,848,398,691
3 CE2EE96D 90,112 2,018,816 12.58 81.99 3505.34 11
49 0 0 3,599,921,875
Free(KB) Total(KB) %free
MountPoint PhysDrv Type
VolNum
C:\pagefile.sys
                   PagingFile 120 2,048 5.86%
631AF993 2
D:\pagefile.sys
                   PagingFile 2,425,572 3,072,000 78.96%
B5D97A0C 3000
H:\pagefile.sys
                   PagingFile
                              2,628
                                        184,320 1.43%
00D37BF0 180
            0
                    NTFS
C:\
                         1,099,109 4,192,492 26.22%
B8BA90A3 0
D:\
                    NTFS
                               116,828
                                      12,129,484 0.96%
6470EC21 0
            2
                              3,027,768
E:\
                    NTFS
                                      35,540,408 8.52%
E8E20702 0
            3
                                559,972 1,198,060 46.74%
F:\
                    NTFS
A891FC02 0
            0
H:\
                    NTFS
                              21,314 208,025 10.25%
5CDA4CC9 0
```

```
--Network-----
 T S MTU Speed RX-Kb/s TX-Kb/s RXe TXe Interface
______
24 1 1500 10000000 0 0 0 MS TCP Loopback interface [None] 3,599,937,500 6 1 1500 10000000 1 17 0 0 AMD PCNET Family Ethernet
Adapter [0004AC4CE34D] 3,599,937,500
--TopTen-----
Interval: 3,599,937,500 (us)
ActiveCPUs: 2
TotalProcesses: 50
TotalThreads: 328
TotalIO: 0
TotalHandles: 8535
     PID User Sys Thrds Hlds
Idle 0 0 6,207,047 2 0
disp+work 290 244,140 13,281 4 171
sqlservr 153 165,703 28,782 43 959
disp+work 257 132,188 15,734 4 669
disp+work 267 126,594 15,063 4 287
disp+work 274 44,812 4,438 4 160
disp+work 270 35,062 5,422 4 176
disp+work 299 29,094 3,156 4 179
disp+work 305 23,594 3,031 4 159
System 2 0 25,265 35 1054
CPU absolute-----
     CPU group-----
MEM absolute-----
                 PID Private Shared
      sqlservr 153 709,849,088 0
disp+work 257 152,592,384 0
      disp+work 267 137,375,744
      disp+work 20, 10,,51, disp+work 270 47,816,704
      disp+work 259 24,985,600
      disp+work 274 16,535,552
      disp+work 323 16,441,344
      disp+work 305 13,455,360
      disp+work 330 13,398,016
      disp+work 290 12,525,568
MEM group-----
                  Private Shared
      sqlservr 709,849,088 0
disp+work 476,282,880 0
```

0

mmc 9,789,440

```
sqlagent 2,265,088
        gwrd 2,105,344
     perfwcol 1,654,784
   msg server 1,470,464
     saposcol 1,409,024
     sqlmangr 1,409,024
     SERVICES 1,372,160
IO absolute-----
            PID IO
IO group-----
--Timestamp----- (Record 12) -----
Thu Jan 18 10:09:00 2001
--VMstat-----
Processors: 2
 Interval: 3,600,061,800 (us)
usr: 8.29% sys: 1.42% idle: 180.56%
queue: 0 freepte: 39590
pi: 9.80/s po: 17.81/s
--IOstat-----
Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c)
W(c) Q S
0 35CB34EC 20,634,112 22,803,968 2816.46 3143.95 0.00 4597
4794 0 0 5,960,423,308
1 CE2EE96C 337,077,248 272,611,840 9950.42 8343.35 0.00 29598
7932 0 0 18,293,783,366
2 CE1F98E1 15,704,064 45,809,664 3286.01 112136.56 0.00 1898
4567 0 0 115,422,586,516
3 CE2EE96D 180,224 1,769,472 8.47 65.86 3525.72 8
28 0 0 3,600,062,500
--FSstat------
MountPoint PhysDrv Type Free(KB) Total(KB) %free
C:\pagefile.sys
                   PagingFile 128 2,048 6.25%
631AF993 2
D:\pagefile.sys
               PagingFile 2,429,128 3,072,000 79.07%
B5D97A0C 3000
H:\pagefile.sys
                   PagingFile 3,084
                                       184,320 1.67%
00D37BF0 180
               NTFS
C:\
                            1,099,109 4,192,492 26.22%
B8BA90A3 0
D:\
            1 NTFS
                               116,800 12,129,484 0.96%
6470EC21 0
               NTFS
E:\
            2
                           3,027,768 35,540,408 8.52%
E8E20702 0
            3
F:\
                    NTFS
                                559,972 1,198,060 46.74%
A891FC02 0
H:\
                    NTFS
                                21,314 208,025 10.25%
5CDA4CC9 0
--Network-----
T S MTU Speed RX-Kb/s TX-Kb/s RXe TXe Interface
```

```
24 1 1500 10000000 0 0 0 0 MS TCP Loopback interface [None] 3 600 046 875
[None] 3,600,046,875
6 1 1500 10000000 1 11 0 0 AMD PCNET Family Ethernet
Adapter [0004AC4CE34D] 3,600,046,875
--TopTen-----
Interval: 3,600,031,250 (us)
ActiveCPUs: 2
TotalProcesses: 50
TotalThreads: 330
TotalIO: 0
TotalHandles: 8537
CPU absolute-----
      PID User Sys Thrds Hlds
Idle 0 0 6,500,453 2 0
disp+work 290 222,797 12,516 4 171
sqlservr 153 112,687 19,203 43 963
disp+work 257 68,359 11,453 4 673
disp+work 267 67,500 9,359 4 287
disp+work 270 33,516 5,594 4 176
disp+work 299 29,156 3,469 4 179
disp+work 274 19,688 2,281 4 160
System 2 0 20,391 37 1050
disp+work 305 10,375 1,188 4 159
      CPU group------
MEM absolute-----
      PID Private Shared sqlservr 153 717,778,944 0 disp+work 257 135,245,824 0
      disp+work 267 126,996,480
      disp+work 270 55,980,032
      disp+work 259 15,212,544
      disp+work 274 14,708,736
      disp+work 330 11,984,896
      disp+work 323 11,640,832
            mmc 172 9,797,632
      disp+work 290 9,711,616
MEM group-----
                    Private Shared
       sqlservr 717,778,944 0
disp+work 424,202,240 0
mmc 9,797,632 0
sqlagent 2,265,088 0
perfwcol 1,609,728 0
      disp+work 424,202,240
     msg server 1,462,272
                                       0
```

```
SERVICES 1,458,176
     sqlmangr 1,409,024
     EXPLORER 1,372,160
     saposcol 1,359,872
IO absolute----
            PID IO
IO group-----
--Timestamp----- (Record 13) -----
Thu Jan 18 11:09:00 2001
--VMstat-----
Processors: 2
 Interval: 3,600,024,100 (us)
usr: 6.28% sys: 0.92% idle: 185.56%
queue: 0 freepte: 39590
pi: 5.04/s po: 8.53/s
--IOstat-----
Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c)
W(c) Q S
0 35CB34EC 12,894,720 12,226,560 1602.43 1716.77 280.73 2923
2601 0 0 3,599,937,500
1 CE2EE96C 71,990,272 136,085,504 4393.05 3789.30 0.00 14480
4034 0 0 8,182,350,902
2 CE1F98E1 8,314,880 25,313,280 1148.37 59131.20 0.00 928
2481 0 0 60,279,582,917
3 CE2EE96D 32,768 716,800 3.24 18.22 3578.40 4
14 0 0 3,599,875,000
--FSstat------
MountPoint PhysDrv Type Free(KB) Total(KB) %free
VolNum
C:\pagefile.sys
                   PagingFile 116 2,048 5.66%
631AF993 2
D:\pagefile.sys
                   PagingFile 2,413,524 3,072,000 78.57%
B5D97A0C 3000
                                        184,320 1.27%
H:\pagefile.sys
                  PagingFile
                              2,332
00D37BF0 180
            0 NTFS
                            1,099,109 4,192,492 26.22%
C:\
B8BA90A3 0
           1 NTFS
                               116,768
                                      12,129,484 0.96%
6470EC21 0
            2
               NTFS
                          3,027,768
E:\
                                      35,540,408 8.52%
E8E20702 0
            3
               NTFS
                                559,972 1,198,060 46.74%
A891FC02 0
H:\
                    NTFS
                                21,314 208,025 10.25%
5CDA4CC9 0
T S MTU Speed RX-Kb/s TX-Kb/s RXe TXe Interface
24 1 1500 10000000 0 0 0 MS TCP Loopback interface
[None] 3,599,875,000
```

```
6 1 1500 10000000 0 3 0 0 AMD PCNET Family Ethernet
Adapter [0004AC4CE34D] 3,599,875,000
--TopTen-----
Interval: 3,599,906,250 (us)
ActiveCPUs: 2
TotalProcesses: 50
TotalThreads: 331
TotalIO: 0
TotalHandles: 8536
      PID User Sys Thrds Hlds

Idle 0 0 6,680,453 2 0

disp+work 290 239,344 14,609 4 171

sqlservr 153 90,063 15,297 43 965

disp+work 299 29,547 2,984 4 179

disp+work 270 23,234 3,890 4 176

disp+work 257 23,750 2,860 4 677

disp+work 267 12,328 1,859 4 287

System 2 0 12,797 37 1047

disp+work 323 8,766 875 4 166

disp+work 296 6,750 641 4 167
CPU absolute-----
      CPU group-----
      PID Private Shared sqlservr 153 724,701,184 0 disp+work 257 130,547,712 0 267 79,089,664 0
MEM absolute-----
      disp+work 267 79,089,664
disp+work 270 32,002,048
      disp+work 290 24,842,240
      disp+work 323 13,447,168
      disp+work 330 12,316,672
           mmc 172 9,687,040
      disp+work 296 9,310,208
      disp+work 254 7,954,432
MEM group-----
             Private Shared
       sqlservr 724,701,184 0
      disp+work 353,329,152
                                  0 0
       mmc 9,687,040
sqlagent 2,265,088
         gwrd 2,146,304
       perfwcol 1,662,976
                                     0
     msg server 1,527,808
                                     0
       SERVICES 1,490,944
                                      0
       saposcol 1,413,120
                                      0
```

sqlmangr 1,409,024 IO absolute-----PID IO IO group-------Timestamp----- (Record 14) ------Thu Jan 18 12:09:00 2001 --VMstat------Processors: 2 Interval: 3,586,080,900 (us) usr: 5.34% sys: 0.65% idle: 188.78% queue: 0 freepte: 39590 pi: 3.85/s po: 4.39/s --IOstat-----Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c) W(c) Q S 0 35CB34EC 9,034,752 7,531,008 1071.82 1030.60 1497.57 2069 1563 0 0 3,600,000,000 1 CE2EE96C 58,501,120 76,995,072 3152.20 2286.69 0.00 11464 2474 0 0 5,438,907,089 2 CE1F98E1 3,284,992 16,384 270.46 1.94 3327.59 389 2 0 0 3,600,000,000 552,960 0.00 10.10 3589.89 0 3 CE2EE96D 0 9 0 0 3,600,000,000 --FSstat------MountPoint PhysDrv Type Free(KB) Total(KB) %free VolNum ______ C:\pagefile.sys PagingFile 120 2,048 5.86% 631AF993 2 D:\pagefile.sys PagingFile 2,415,724 3,072,000 78.64% B5D97A0C 3000 H:\pagefile.sys PagingFile 2,476 184,320 1.34% 00D37BF0 180 0 NTFS C:\ 1,099,109 4,192,492 26.22% B8BA90A3 0 D:\ 1 NTFS 116,588 12,129,484 0.96% 6470EC21 0 2 NTFS E:\ 3,027,768 35,540,408 8.52% E8E20702 0 3 F:\ NTFS 559,972 1,198,060 46.74% A891FC02 0 0 H:\ NTFS 21,314 208,025 10.25% 5CDA4CC9 0 --Network-----T S MTU Speed RX-Kb/s TX-Kb/s RXe TXe Interface 24 1 1500 10000000 0 0 0 MS TCP Loopback interface [None] 3,599,953,125 6 1 1500 10000000 0 1 0 0 AMD PCNET Family Ethernet Adapter [0004AC4CE34D] 3,599,953,125

--TopTen-----Interval: 3,599,984,375 (us) ActiveCPUs: 2 TotalProcesses: 50 TotalThreads: 332 TotalIO: 0 TotalHandles: 8548 PID User Sys Thrds Hlds
Idle 0 0 6,770,094 2 0
disp+work 290 226,062 10,297 4 171
sqlservr 153 77,891 12,078 43 967
disp+work 299 29,625 2,906 4 179
disp+work 257 9,891 1,468 4 679
disp+work 296 10,312 547 4 167
disp+work 323 8,015 657 4 166
System 2 0 7,594 37 1048
disp+work 267 5,328 532 4 289
perfwcol 179 1,000 4,547 2 71 CPU absolute-----User Sys Thrds Hlds
Idle 0 6,770,094 2 0
disp+work 300,343 18,250 82 3954
sqlservr 77,891 12,078 43 967
System 0 7,594 37 1048
perfwcol 1,000 4,547 2 71
inetinfo 2,797 2,672 21 342
sqlagent 891 171 8 93
saposcol 78 219 4 77
SERVICES 31 234 21 288
LSASS 16 32 12 102 CPU group-----PID Private Shared sqlservr 153 724,893,696 0 disp+work 257 128,856,064 0 disp+work 267 86,138,880 0 disp+work 270 32,739,328 0 disp+work 290 17,399,808 0 disp+work 274 15,421,440 0 disp+work 323 15,020,032 0 disp+work 330 13,037,568 0 disp+work 296 12,021,760 0 MEM absolute----disp+work 296 12,021,760 mmc 172 9,687,040 Private Shared
sqlservr 724,893,696 0
disp+work 372,846,592 0
mmc 9,687,040 0
sqlagent 2,265,088 0
perfwcol 1,662,976 0
msg_server 1,609,728 0
SERVICES 1,490,944 0
saposcol 1,413,120 0
EXPLORER 1,409,024 0
sqlmangr 1,409,024 0 MEM group----msg server 1,609,728

IO absolute-----

IO group-----

--Timestamp----- (Record 15) -----Thu Jan 18 13:09:00 2001

--VMstat-----

--IOstat-----

Processors: 2

Interval: 3,613,994,400 (us)

usr: 8.93% sys: 1.32% idle: 178.70%

queue: 0 freepte: 39590 pi: 16.09/s po: 18.13/s

Dk Signatur W(c) Q S	Read(B)	Write(B)	Read(t)	Write(t)	Idle(t)	R(C)
0 35CB34EC 3	37,955,584 3,327,175	22,844,928	5408.66	3364.65	0.00	8849
1 CE2EE96C 21 7769 0 0 24,05	5,400,960	278,340,6083	16070.45	7988.35	0.00	47311
	21,651,456	45,572,096	2974.15	99174.99	0.00	2266
3 CE2EE96D 23 0 0 3,600,0	32,768	1,516,544	5.02	60.44	3534.61	4
VolNum	PhysDrv		Free		Total(KB)	%free
C:\pagefile.sys 631AF993 2		PagingFile		128	2,048	6.25%
D:\pagefile.sys B5D97A0C 3000		PagingFile	2,406	6,600	3,072,000	78.34%
H:\pagefile.sys 00D37BF0 180		PagingFile	1	784	184,320	0.97%
C:\ B8BA90A3 0	0	NTFS	1,099	,109	4,192,492	26.22%
D:\ 6470EC21 0	1	NTFS	116	5,372 1	2,129,484	0.96%
E:\ E8E20702 0	2	NTFS	3,027	7,768 3	85,540,408	8.52%
F:\ A891FC02 0	3	NTFS	559	9,972	1,198,060	46.74%
H:\ 5CDA4CC9 0	0	NTFS	21	,314	208,025	10.25%
Network T S MTU	Speed RX-Kb	/s TX-Kb/s F	XXe TXe I	nterface	. 	
24 1 1500 100 [None] 3,600,140	00000	0 0	0 0 M	IS TCP Lo	opback int	erface
6 1 1500 100 Adapter [0004AC4	00000	1 12 0,140,625	0 0 A	MD PCNET	' Family Et	hernet

--TopTen----Interval: 3,600,093,750 (us) ActiveCPUs: 2

TotalProcesses: 50
TotalThreads: 328
TotalIO: 0
TotalHandles: 8558

IO group-----

TotalHandles:	8558				
CPU absolute					
	PID	User		Thrds	Hlds
Idle		0	6,458,344		0
disp+work		23,516	13,625		171
sqlservr		23,515	20,469		969
disp+work		15,656	10,609		289
disp+work		58,765	7,750		683
disp+work disp+work		29 , 797	3,172	4	179
System		19,687 0	2,125 17,609		160 1051
disp+work		L4,547	1,610		159
disp+work		11,328	1,875		176
0.10p + 1101 /1	. 270	,020	1,010	-	1,0
CPU group					
12	User		Sys Thrds		
Idle		6,458			
disp+work			,124 82		
sqlservr			,469 43		
System perfwcol			,609 35 ,422 2	1051 71	
inetinfo			,703 21		
sqlagent		Τ,	94 8	93	
saposcol			375 4		
SERVICES			125 20		
msdtc	62		94 21	110	
NATION A D D					
MEM absolute	PID Pi	ivate	Shared		
sqlservr				0	
disp+work		519,744		0	
disp+work		96,320		0	
disp+work			0		
disp+work			0		
disp+work		72,992	0		
disp+work	290 14,79	8,848	0		
disp+work	259 12 , 54		0		
disp+work	330 12,23		0		
disp+work	296 11,10	08,352	0		
MEM group					
3 ~t	Private	Sha	ared		
sqlservr	728,489,984	1	0		
disp+work		5	0		
mmc	9,682,944		0		
gwrd			0		
sqlagent	2,265,088		0		
perfwcol	1,658,880		0		
msg_server	1,544,192		0		
saposcol sqlmangr	1,409,024 1,409,024		0 0		
SERVICES	1,392,640		0		
521(1200	1,002,010		Č		
IO absolute					
	PID IC)			

--Timestamp----- (Record 16) ------Thu Jan 18 14:09:00 2001 --VMstat------Processors: 2 Interval: 3,600,042,000 (us) usr: 8.96% sys: 1.52% idle: 179.01% queue: 0 freepte: 39590 pi: 23.73/s po: 20.58/s --IOstat-----Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c) W(c) Q S 0 35CB34EC 55,858,176 26,415,104 8099.28 4145.70 0.00 12707 5881 0 0 12,244,996,795 1 CE2EE96C 309,177,856 314,481,66421444.06 9355.81 0.00 69985 9156 0 0 30,799,881,911 2 CE1F98E1 52,355,072 26,378,240 8915.40 79102.25 0.00 4900 2842 0 0 88,017,652,084 3 CE2EE96D 65,536 21,647,360 10.91 20125.52 0.00 8 386 0 0 20,136,439,648 --FSstat-----MountPoint PhysDrv Type Free(KB) Total(KB) %free VolNum C:\pagefile.sys PagingFile 120 2,048 5.86% 631AF993 2 D:\pagefile.sys PagingFile 2,391,916 3,072,000 77.86% B5D97A0C 3000 H:\pagefile.sys PagingFile 1,088 184,320 0.59% 00D37BF0 180 C:\ 0 NTFS 1,099,012 4,192,492 26.21% B8BA90A3 0 D:\ 1 NTFS 116,296 12,129,484 0.96% 6470EC21 0 E:\ 2 NTFS 3,027,768 35,540,408 8.52% E8E20702 0 F:\ 3 NTFS 559,972 1,198,060 46.74% A891FC02 0 21,314 208,025 10.25% H:\ NTFS 5CDA4CC9 0 --Network------T S MTU Speed RX-Kb/s TX-Kb/s RXe TXe Interface 24 1 1500 10000000 0 0 0 MS TCP Loopback interface

6 1 1500 10000000 1 12 0 0 AMD PCNET Family Ethernet

ActiveCPUs: 2
TotalProcesses: 50
TotalThreads: 328
TotalIO: 0

[None] 3,599,984,375

Adapter [0004AC4CE34D] 3,599,984,375

Tota	lHandles:	8565		
CPU	absolute			
		PID User	Sys Thro	ds Hlds
	Idle	0 0 6,444,		2 0
	disp+work		,547	4 171
	sqlservr			43 971
	disp+work	257 80,891 11,	,266	4 687
	disp+work		,891	4 289
	disp+work		, 359	4 179
	disp+work		, 953	4 176
	System			35 1055
	disp+work		,797	4 166
	disp+work	274 18,954 2,	,015	4 160
CPU	group			
		User Sys Th		ds
	Idle	0 6,444,500	2	0
	disp+work	513,956 53,704	82 396	
	sqlservr	127,750 21,781	43 97	
	System	0 21,406	35 105	
	perfwcol	938 4,687		71
	inetinfo	1,656 1,672	21 34	
	sqlagent	578 141		93
	saposcol	187 422 235 157		77
	SPOOLSS SERVICES	235 157 63 282	7 14	18 36
	SERVICES	65 262	20 20	>0
MEM	absolute			
			ared	
	sqlservr	153 704,569,344	0	
	disp+work	257 135,393,280	0	
	disp+work	267 125,841,408	0	
	disp+work	270 46,485,504	0	
	disp+work	323 38,518,784	0	
	disp+work	330 26,054,656	0	
	disp+work	259 22,220,800	0	
	disp+work disp+work	274 21,331,968 305 15,630,336	0	
	disp+work	290 13,352,960	0 0	
	disp+work	290 13,332,900	U	
MEM	group			
	_	Private Shared		
		704,569,344 0		
	•	191,585,536 0		
	mmc	9,687,040 0		
	sqlagent	2,240,512 0		
	perfwcol	1,654,784 0		
	gwrd	1,634,304 0		
		1,568,768 0		
	SERVICES			
	saposcol	1,409,024 0 1,409,024 0		
	sqrmangr	1,409,024		
IO	absolute			
		PID IO		
IO	group			
		IO		

IO

--Timestamp----- (Record 17) -----Thu Jan 18 15:09:00 2001 --VMstat-----Processors: 2 Interval: 3,585,866,200 (us) usr: 6.63% sys: 0.98% idle: 185.54% queue: 0 freepte: 39590 pi: 10.04/s po: 12.39/s Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c) W(c) Q S 0 35CB34EC 28,039,168 20,866,048 3658.82 2588.25 0.00 5852 3703 0 0 6,247,077,672 1 CE2EE96C 136,020,992 189,797,376 9274.91 5120.55 0.00 27710 5363 0 0 14,395,475,520 2 CE1F98E1 19,988,480 21,749,760 6268.15 49485.03 0.00 1854 1936 0 0 55,753,191,085 3 CE2EE96D 3,022,848 4,022,272 33.22 188.54 3378.23 67 68 0 0 3,600,000,000 MountPoint PhysDrv Type Free(KB) Total(KB) %free VolNum C:\pagefile.sys PagingFile 116 2,048 5.66% 631AF993 2 PagingFile 2,394,984 3,072,000 77.96% D:\pagefile.sys B5D97A0C 3000 H:\pagefile.sys PagingFile 1,912 184,320 1.04% 00D37BF0 180 0 NTFS C:\ 1,099,001 4,192,492 26.21% B8BA90A3 0 1 NTFS D:\ 116,172 12,129,484 0.96% 6470EC21 0 2 NTFS E:\ 3,027,768 35,540,408 8.52% E8E20702 0 3 NTFS F:\ 559,972 1,198,060 46.74% A891FC02 0 H:\ 0 NTFS 21,314 208,025 10.25% 5CDA4CC9 0 --Network------T S MTU Speed RX-Kb/s TX-Kb/s RXe TXe Interface 24 1 1500 10000000 0 0 0 MS TCP Loopback interface [None] 3,599,984,375 6 1 1500 10000000 0 6 0 0 AMD PCNET Family Ethernet Adapter [0004AC4CE34D] 3,599,984,375 --TopTen-----Interval: 3,599,968,750 (us)
ActiveCPUs: 2 TotalProcesses: 51 TotalThreads: 329 TotalIO: 0 TotalHandles: 8651 CPU absolute-----

	Idle disp+work sqlservr disp+work disp+work System disp+work disp+work disp+work	153 299 267 2 270 323 274 397	9 2 2 1	User 0 3,406 7,813 9,437 6,969 0 0,281 8,000 7,828 6,625	1	3,547 2,265 5,515 3,032 3,031 1,422 1,031 875 687	43 4 4 35 4 4 4	Hlds 0 171 958 179 289 1050 176 166 160	
CPU gr	oup								
	Idle		User	C (52		Thrds	Hlds		
	disp+work	33/	0 1,624	6,653	046	2 82			
	sqlservr		7,813		515	43	958		
	System		0	13	,031	35			
	perfwcol		1,046	4	, 454	2	71		
	inetinfo		.,735		,625		342		
	DRWTSN32		328		703	1	622		
	sqlagent		734		94	8	93		
	saposcol		94		234	4	77		
	SERVICES		94		156	20	289		
MUM - l-	1								
MEM ab	solute			 ivate		hared			
	sqlservr	153		42,624	۵	nared (١		
	disp+work	267							
	disp+work		46.120	0.960		0	•		
	disp+work	270	40,56	6,784		Ō			
	disp+work		28,79			0			
	disp+work		13,889			0			
	disp+work		13,312			0			
	disp+work		10,153			0			
	disp+work		10,059			0			
	disp+work	259	9,71	L, 616		0			
MEM ar	oup			- 					
9=		Pri	vate	Sha	ared				
	sqlservr				0				
	disp+work	324,05	0,944		0				
	mmc	9,682			0				
	sqlagent	2,248			0				
		2,146			0				
	perfwcol				0				
Itt	sg_server saposcol	1,560 1,409			0				
	sqlmangr				0				
	msdtc				Ő				
		•	•						
IO ab	solute	·							
		PID	IO						
T-0									
IO gr	oup								
		IO							
Time	stamp		(Re	ecord 1	18) -				
Thu Ja	n 18 16:09	:00 20	01		,				

queue: 0 freepte: 39590 pi: 9.79/s po: 16.62/s

IOstat Dk Signatur W(c) Q S	Read(B)	Write(B)	Read(t)	 Write(t)	Idle(t)	R(c)
0 35CB34EC 4518 0 0 5,	,	24,628,736	2862.25	2929.93	0.00	4938
1 CE2EE96C . 7568 0 0 16.	133,763,072	252,774,912	9501.33	7129.33	0.00	29649
2 CE1F98E1 2684 0 0 68	21,651,456	32,374,784	7040.96	61060.04	0.00	2311
3 CE2EE96D 37 0 0 3,600	1,392,640	2,314,240	6.75	90.70	3502.57	23
FSstat						
MountPoint VolNum	PhysDrv	Type 	Free	e(KB) 	Total(KB)	%fre

MountPoint VolNum	PhysDrv	Туре	Free (KB)	Total(KB)	%free
C:\pagefile.sys		PagingFile	124	2,048	6.05%
D:\pagefile.sys B5D97A0C 3000		PagingFile	2,379,708	3,072,000	77.46%
H:\pagefile.sys		PagingFile	1,700	184,320	0.92%
C:\ B8BA90A3 0	0	NTFS	1,099,001	4,192,492	26.21%
D:\ 6470EC21 0	1	NTFS	114,948	12,129,484	0.95%
E:\ E8E20702 0	2	NTFS	3,027,768	35,540,408	8.52%
F:\ A891FC02 0	3	NTFS	559 , 972	1,198,060	46.74%
H:\ 5CDA4CC9 0	0	NTFS	21,314	208,025	10.25%

14	C C 44 1	OT 12						···· ·
T	S	MTU	Speed	RX-Kb/s	TX-Kb/s	RXe	TXe	Interface
24	1	1500	10000000	0	0	0	0	MS TCP Loopback interface
[No	ne]	3,600	,109,375		-	_		
6	1	1500	10000000	1	14	0	0	AMD PCNET Family Ethernet
Ada	pte:	r [0004	4AC4CE34D1					

--TopTen-----

Interval: 3,600,109,375 (us) ActiveCPUs: 2

ActiveCPUs: 2
TotalProcesses: 51
TotalThreads: 332
TotalIO: 0
TotalHandles: 8665

sqlservr disp+work disp+work System disp+work disp+work disp+work	267 397 2 299 270 305	27,000 85,485 88,296 0 29,203 27,516 20,671 12,140	20,297 20,812 15,031 41,782 3,500 4,828 2,281 1,797	43 4 4 37 4 4 4	169 1048 179 176	
CPU group						
Idle	User 0		ys Thrds 78 2	Hlds		
disp+work sqlservr System perfwcol inetinfo sqlagent	509,218 127,000 0 1,157 1,703 719	63,79 20,29 41,78 4,48 1,55	98 82 97 43 32 37 34 2 78 21	0 3448 965 1048 71 342 93		
saposcol gwrd			66 4 93 6	77 164		
SERVICES		14		289		
MEM absolute						
,	PID Pi		Shared			
sqlservr disp+work			0			
disp+work			0			
disp+work	270 96,39	99,360	0			
disp+work			0			
disp+work disp+work	•		0			
disp+work			0 0			
disp+work			0			
mmc	172 9,68	37,040	0			
MEM group						
	Private		ed			
disp+work mmc	707,829,760 447,066,112 9,687,040 2,244,608		0 0 0			
	1,658,880		0			
msg_server	1,466,368		0			
SERVICES	1,417,216		0			
	1,413,120 1,409,024		0			
	1,372,160		0			
IO absolute						
to absorace	PID IC					
IO group	10					
Timestamp Thu Jan 18 17:09	(F Э:00 2001	Record 19)				
VMstat	-					
Processors: 2 Interval: 3,59	99,952,100 ((us)				

usr: 7.44% sys: 1.15% idle: 182.79% queue: 0 freepte: 39590 pi: 6.16/s po: 13.45/s

p1: 6.16/s po:	13.45/8					
IOstat Dk Signatur W(c) Q S		Write(B)	Read(t)	 Write(t)	Idle(t)	R(c)
0 35CB34EC 3730 0 0 4,15	12,957,696	17,926,144	1745.79	2405.92	0.00	2926
1 CE2EE96C 6557 0 0 11,8	95,968,256	210,708,992	5793.25	6094.12	0.00	18579
	14,614,528	23,224,320	1111.76	45070.37	0.00	1753
3 CE2EE96D 38 0 0 3,599,	1,425,408	2,162,688	12.79	98.27	3488.82	27
VolNum	PhysDrv	Туре			Total (KB)	 %free
C:\pagefile.sys		PagingFile		120	2,048	5.86%
D:\pagefile.sys B5D97A0C 3000		PagingFile	2,383	L , 852 3	3,072,000	77.53%
H:\pagefile.sys		PagingFile	2	2,128	184,320	1.15%
C:\ B8BA90A3 0	0	NTFS	1,099	9,001 4	1,192,492	26.21%
D:\ 6470EC21 0	1	NTFS	115	5,116 12	2,129,484	0.95%
E:\ E8E20702 0	2	NTFS	3,027	7,768 35	5,540,408	8.52%
F:\ A891FC02 0	3	NTFS	559	9,972 1	,198,060	46.74%
H:\ 5CDA4CC9 0	0	NTFS	21	.,314	208,025	10.25%
Network T S MTU	Speed RX-Ki	o/s TX-Kb/s F	XXe TXe I	Interface		
24 1 1500 10 [None] 3,599,81		0 0	0 0 1	S TCP Loc	pback int	erface
	000000	0 9 99,812,500	0 0 A	MD PCNET	Family Et	hernet
TopTen Interval: ActiveCPUs: TotalProcesses: TotalThreads: TotalIO: TotalHandles:	3,599,812,5 2 51 332 0 8636	500 (us)	- 			-
CPU absolute						
Idle disp+work sqlservr disp+work disp+work	153 10 397 6)1,453 17 53,579 7	Sys Thr ,625 ,828 ,938 ,703 ,063	ds Hlds 2 0 4 171 43 967 4 173 4 291		

disp+work disp+work System disp+work disp+work	305 2	28,813 14,860 0 13,062 13,157	3,375 1,688 15,922 2,282 2,000	4 37	159 1037	
CPU group				· 		
T -17 -	User		s Thrds	Hlds		
Idle disp+work	0 429 , 751		5 2 3 82			
sqlservr	101,453	17,93	8 43	967		
System	0	15 , 92	2 37	1037		
perfwcol		4,78	1 2 7 21	71		
inetinfo sqlagent				342 93		
saposcol				93 77		
msdtc	31	10	9 21	110		
SERVICES	31	6	2 20	289		
MEM absolute			-			
HER absorace		rivate	Shared			
sqlservr	153 724, 267 108,		0			
disp+work	267 108,		0			
disp+work	397 108,0 290 15,90		0			
disp+work			0			
disp+work	2/0 12,5		0			
disp+work			0			
mmc disp+work			0 0			
disp+work	356 8,8 296 8,8	22,784	Ö			
MEM group	Private	Share	-			
sqlservr	724,668,41		0			
	334,340,09		0			
	9,797,632 2,252,800))			
perfwcol)			
SERVICES	1,622,016)			
msg_server)			
saposcol EXPLORER	1,413,120 1,409,024))			
	1,409,024)			
IO absolute	PID I					
	FID I	J				
IO group						
	10					
TimestampThu Jan 18:09		Record 20)				
VMstat						
Processors: 2						
Interval: 3,59) .			
usr: 4.95% sys: queue: 0 freepte		re: TQQ.QQ;	5			
pi: 2.10/s po: 2						

IOstat Dk Signatur W(c) Q S	Read(B)	Write(B)	Read(t)	Write(t)	Idle(t)	 R(c)
0 35CB34EC		5,171,712	581.13	742.66	2276.19	1454
1041 0 0 3,60 1 CE2EE96C	24,870,912	44,877,824	1889.18	1328.59	382.21	5722
1477 0 0 3,60 2 CE1F98E1	1,024,000	8,626,176	236.89	19600.60	0.00	125
942 0 0 19,83 3 CE2EE96D	0	552,960	0.00	10.87	3589.12	0
9 0 0 3,600,0	00,000					
FSstat MountPoint		Type	 Free		 Cotal(KB)	%free
VolNum						
C:\pagefile.sys 631AF993 2		PagingFile		120	2,048	5.86%
D:\pagefile.sys B5D97A0C 3000		PagingFile	2,386	5,460	3,072,000	77.68%
H:\pagefile.sys		PagingFile	2	2,480	184,320	1.35%
00D37BF0 180 C:\	0	NTFS	1,099	9,001	1,192,492	26.21%
B8BA90A3 0 D:\	1	NTFS	115	5,104 12	2,129,484	0.95%
6470EC21 0 E:\	2	NTFS	3,027	7,768 35	5,540,408	8.52%
E8E20702 0 F:\	3	NTFS	559	9 , 972 1	,198,060	46.74%
A891FC02 0 H:\	0	NTFS	21	1,314	208,025	10.25%
5CDA4CC9 0					·	
Network T S MTU		/s TX-Kb/s I				
	000000			- 		
[None] 3,599,81	2,500	•			pback int	
6 1 1500 100 Adapter [0004AC		0 0 9,812,500	0 0 F	MMD PCNET	Family Et	hernet
TopTen						
<pre>Interval: ActiveCPUs:</pre>	3,599,812,5 2	00 (us)				
TotalProcesses: TotalThreads:	51 331					
TotalIO:	0					
TotalHandles:	8628					
CPU absolute	PID	User	Sys Thr	da Ulda		
Idle	0	0 6,799		ds Hlds		
disp+work sqlservr			485	4 171		
disp+work	299 3		L,484 2,906	43 967 4 179		
disp+work	296 1	0,047	515	4 167		
disp+work disp+work		8,094 6,375 1	907 .,047	4 166 4 177		
System	2		937	37 1033		

```
perfwcol 179 1,188 4,328 2 71
disp+work 356 4,531 391 4 163
       User Sys Thrds Hlds
Idle 0 6,799,906 2 0
disp+work 280,220 17,734 82 3426
sqlservr 72,859 11,484 43 967
System 0 6,937 37 1033
perfwcol 1,188 4,328 2 71
inetinfo 1,672 1,656 21 342
sqlagent 672 78 8 93
SERVICES 78 141 20 289
saposcol 109 94 4 77
msdtc 63 47 21 110
CPU group-----
MEM absolute----
       PID Private Shared
sqlservr 153 727,207,936 0
disp+work 397 94,773,248 0
disp+work 267 76,574,720 0
disp+work 290 16,416,768 0
disp+work 323 14,204,928 0
disp+work 296 13,021,184 0
disp+work 330 12,775,424 0
disp+work 270 9,945,088 0
mmc 172 9,797,632 0
disp+work 254 7,987,200 0
       MEM group-----
        mmc 9,797,632
sqlagent 2,252,800
gwrd 2,158,592
perfwcol 1,662,976
                                            0
                                            0
      msg_server 1,560,576
SERVICES 1,458,176
                                            0
                                            0
         EXPLORER 1,409,024
                                              0
         sqlmangr 1,409,024
IO absolute----
                     PID IO
IO group-----
--Timestamp----- (Record 21) -----
Thu Jan 18 19:09:00 2001
--VMstat-----
Processors: 2
  Interval: 3,614,433,700 (us)
usr: 5.42% sys: 0.57% idle: 187.20%
queue: 0 freepte: 39590
pi: 0.87/s po: 1.88/s
--IOstat------
Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c)
```

W(c) Q S							
0 35CB34EC 979 0 0 3,600,		4,437,50	4 234	.61	682.5	4 2682.83	390
	11,269,120	39,311,36	0 1013	.35	1276.9	1309.72	2689
	28,762,112	14,426,11	226853	.70	9844.5	0.00	2039
3 CE2EE96D 18 0 0 3,600,0	65 , 536	618,49	6 5	.49	20.1	.0 3574.40	8
FSstat							
MountPoint VolNum	PhysDrv	Туре		Free ((KB)	Total(KB)	%free
C:\pagefile.sys		PagingFil	e		120	2,048	5.86%
D:\pagefile.sys B5D97A0C 3000		PagingFil	e 2	,385,	772	3,072,000	77.66%
<pre>H:\pagefile.sys 00D37BF0 180</pre>		PagingFil	Э	2,	464	184,320	1.34%
C:\ B8BA90A3 0	0	NTFS	1	,099,	001	4,192,492	26.21%
D:\ 6470EC21 0	1	NTFS		115,	024	12,129,484	0.95%
E:\ E8E20702 0	2	NTFS	3	,027,	768	35,540,408	8.52%
F:\ A891FC02 0	3	NTFS		559,	972	1,198,060	46.74%
H:\ 5CDA4CC9 0	0	NTFS		21,	314	208,025	10.25%
Network						-	
T S MTU	Speed RX-Kb,	/s TX-Kb/s 	RXe T	Xe In	terfac	:e 	
24 1 1500 100 [None] 3,600,093)00000 3 , 750	0 0	0			oopback in	
6 1 1500 100 Adapter [0004AC4		0 0 0,093,750	0	0 AM	ID PCNE	T Family E	thernet
TopTen							
<pre>Interval: ActiveCPUs:</pre>	3,600,093,75 2	50 (us)					
TotalProcesses:	51 329						
TotalThreads: TotalIO:	0						
TotalHandles:	8632						
CPU absolute						. _	
Idle	PID O	User 0 6,7	5ys 56,500	Thro		.s 0	
disp+work		3,468	9,953		4 17		
sqlservr			12,266		3 96		
disp+work disp+work		5,000 7,750	2,766 828		4 17 4 16		
disp+work		9 , 687	562		4 16		
disp+work	323	3,015	1,062		4 16	6	
disp+work	397 (6 , 578	782		4 18		
System perfwcol		0 1,421	6,188 4,203		35 103 2 7	1	

CPU group						
T -			Thrds H			
		6,766,500 16,436	2 82 3			
salser	ork 302,263 ovr 85,844	12,266	43	967		
Syst	em 0	6,188	35 1	1033		
perfwo	col 1,421	4,203	2	71		
inetin	1,891	1,562		342		
sqlage saposo	ent 328 col 109	31 203	8 4	93 77		
SERVIC			20			
	itc 15	32				
MEM absolute-	DTN D1		 hared			
salser	rvr 153 759,2		0			
disp+wo	ork 397 85,40	9,792	0			
disp+wo	ork 267 47,42 ork 290 16,44	23,488	0			
disp+wo	ork 290 16,44	19,536	0			
	ork 323 15,49		0			
disp+wc	ork 330 12,94 ork 296 11,16	55,696	0			
n n	ork 296 11,16 nmc 172 9,79 ork 356 9,50	7,632	Ö			
disp+wo	ork 356 9,50	02,720	0			
disp+wo	ork 254 7,95	58,528	0			
MEM group						
9= 0 o.p		Shared				
	vr 759,226,368					
	ork 241,762,304					
u analane	nmc 9,797,632 ent 2,252,800	0				
	vrd 1,753,088	Ö				
perfwo	col 1,658,880	0				
msg_serv	ver 1,560,576	0				
	col 1,413,120 ngr 1,409,024	0				
	RER 1,409,024	0				
IO absolute-						
	PID IC)				
IO group						
	IO					
Timestamp	(E	Record 22) -				
Thu Jan 18 20						
TTM - + - +						
VMstat Processors: 2						
	3,585,495,500	(us)				
	sys: 0.55% id					
queue: 0 free						
pi: 0.07/s po	o: 1.55/s					
IOstat						
Dk Signatur	Read(B)	Write(B)	Read(t)	Write(t)	Idle(t)	R(c)
W(c) Q S						
	205,312					43
0 000001110	200,012	2,33.,030	20.41	_ 551.01		10

```
900 0 0 3,600,000,000
 1 CE2EE96C 884,736 33,489,408 114.03 1020.14 2465.82 214
1232 0 0 3,600,000,000
 2 CE1F98E1 933,888
                           0 92.31 0.00 3507.68 114
0 0 0 3,600,000,000
 3 CE2EE96D 8,192 561,152 1.35 13.25 3585.39 1
11 0 0 3,600,000,000
--FSstat-----
MountPoint PhysDrv Type Free(KB) Total(KB) %free
VolNum
                  PagingFile 120 2,048 5.86%
C:\pagefile.sys
 631AF993 2
D:\pagefile.sys
                PagingFile 2,382,948 3,072,000 77.57%
B5D97A0C 3000
                    PagingFile 2,248 184,320 1.22%
H:\pagefile.sys
00D37BF0 180
              0 NTFS 1,099,001 4,192,492 26.21%
C:\
B8BA90A3 0
             1 NTFS
                                      114,036 12,129,484 0.94%
D:\
6470EC21 0
              2 NTFS 3,027,768 35,540,408 8.52%
E:\
E8E20702 0
              3 NTFS
                                     559,972 1,198,060 46.74%
F:\
A891FC02 0
              0 NTFS 21,314 208,025 10.25%
H:\
5CDA4CC9 0
--Network-----
T S MTU Speed RX-Kb/s TX-Kb/s RXe TXe Interface
24 1 1500 10000000 0 0 0 MS TCP Loopback interface [None] 3,599,890,625 6 1 1500 10000000 0 0 0 0 AMD PCNET Family Ethernet
Adapter [0004AC4CE34D] 3,599,890,625
--TopTen-----
Interval: 3,599,890,625 (us) ActiveCPUs: 2
TotalProcesses: 51
TotalThreads: 330
TotalIO: 0
TotalHandles: 8638
     PID User Sys Thrds Hlds
Idle 0 0 6,806,062 2 0
disp+work 290 223,500 11,078 4 171
sqlservr 153 73,875 10,765 43 967
disp+work 299 28,859 2,609 4 179
disp+work 323 8,172 813 4 166
System 2 0 6,343 35 1033
disp+work 397 5,390 718 4 185
disp+work 296 5,359 407 4 167
perfwcol 179 1,375 4,219 2 71
disp+work 356 3,657 250 4 163
CPU group-----
          User Sys Thrds Hlds Idle 0 6,806,062 2 0
```

```
      disp+work
      276,375
      16,281
      82
      3434

      sqlservr
      73,875
      10,765
      43
      967

      System
      0
      6,343
      35
      1033

      perfwcol
      1,375
      4,219
      2
      71

      inetinfo
      1,687
      1,782
      21
      342

      sqlagent
      360
      47
      8
      93

      saposcol
      94
      187
      4
      77

      msg_server
      78
      79
      4
      85

      SERVICES
      16
      125
      20
      289

MEM absolute-----
          PID Private Shared sqlservr 153 757,809,152 0 disp+work 397 77,152,256 0 disp+work 267 35,467,264 0 disp+work 290 13,807,616 0 disp+work 330 13,312,000 0 disp+work 296 11,780,096 0 mmc 172 9,805,824 0 disp+work 254 7,962,624 0 disp+work 362 7,024,640 0
MEM group-----
                                Private Shared 7,809.152
        sqlservr 757,809,152
disp+work 213,364,736
mmc 9,805,824
sqlagent 2,252,800
perfwcol 1,662,976
msg_server 1,581,056
SERVICES 1,433,600
saposcol 1,413,120
EXPLORER 1,409,024
sqlmangr 1,409,024
0
IO absolute-----
                             PID IO
IO group-----
                                IO
--Timestamp----- (Record 23) -----
Thu Jan 18 21:09:00 2001
--VMstat------
Processors: 2
    Interval: 3,614,577,600 (us)
usr: 6.06% sys: 0.90% idle: 185.24%
queue: 0 freepte: 39590
pi: 1.26/s po: 2.15/s
--IOstat-----
Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c) W(c) Q S
  0 35CB34EC 4,179,456 5,065,728 527.50 813.43 2259.07 921
1146 0 0 3,600,015,625
  1 CE2EE96C 14,435,840 59,802,112 1516.88 1944.87 138.25 3360
2150 0 0 3,600,015,625
```

2 CE1F98E1 75,284,480 22,192,128298151.60 54578.65 0.00 9017 1829 0 0 352,730,268,286 3 CE2EE96D 32,768 585,728 2.96 13.78 3583.26 4 13 0 0 3,600,015,625 --FSstat-----MountPoint PhysDrv Type Free(KB) Total(KB) %free ______ C:\pagefile.sys PagingFile 120 2,048 5.86% 631AF993 2 PagingFile 2,376,784 3,072,000 77.37% D:\pagefile.sys B5D97A0C 3000 PagingFile 1,828 184,320 0.99% H:\pagefile.sys 00D37BF0 180 0 NTFS C:\ 1,099,001 4,192,492 26.21% B8BA90A3 0 1 NTFS D:\ 113,100 12,129,484 0.93% 6470EC21 0 2 NTFS E:\ 3,027,768 35,540,408 8.52% E8E20702 0 3 NTFS F:\ 559,972 1,198,060 46.74% A891FC02 0 0 NTFS H:\ 21,314 208,025 10.25% 5CDA4CC9 0 --Network-----T S MTU Speed RX-Kb/s TX-Kb/s RXe TXe Interface ______ 24 1 1500 10000000 0 0 0 0 MS TCP Loopback interface [None] 3,600,234,375 6 1 1500 10000000 0 0 0 0 AMD PCNET Family Ethernet Adapter [0004AC4CE34D] 3,600,234,375 --TopTen------Interval: 3,600,250,000 (us)
ActiveCPUs: 2 TotalProcesses: 51 TotalThreads: 330 TotalIO: 0 TotalHandles: 8642 CPU absolute-----CPU group------User Sys Thrds Hlds
Idle 0 6,695,938 2 0
disp+work 333,610 27,047 82 3434
sqlservr 101,719 22,016 43 967
System 0 8,453 35 1035

```
    perfwcol
    969
    4,625
    2
    71

    inetinfo
    1,750
    1,609
    21
    342

    saposcol
    109
    156
    4
    77

    sqlagent
    234
    31
    8
    93

    SERVICES
    46
    203
    20
    289

    mmc
    16
    78
    4
    83

MEM absolute-----
        PID Private Shared sqlservr 153 821,698,560 0
       disp+work 397 65,249,280
disp+work 267 19,066,880
                                                    0
                                                  0
       disp+work 296 16,683,008
disp+work 323 13,561,856
                                                   0
       disp+work 323 13,561,836 disp+work 330 13,082,624 disp+work 290 11,395,072 mmc 172 9,687,040 disp+work 254 7,966,720 disp+work 356 7,454,720
MEM group-----
       Private Shared sqlservr 821,698,560 0 disp+work 182,579,200 0
     disp+work 182,579,200
mmc 9,687,040
sqlagent 2,252,800
perfwcol 1,654,784
msg_server 1,486,848
saposcol 1,409,024
EXPLORER 1,409,024
sqlmangr 1,409,024
SERVICES 1,376,256
                                           0
                                           0
                                            0
IO absolute-----
                     PID IO
IO group-----
                      IO
--Timestamp----- (Record 24) -----
Thu Jan 18 22:09:00 2001
--VMstat-----
Processors: 2
  Interval: 3,585,425,300 (us)
usr: 4.92% sys: 0.60% idle: 189.75%
queue: 0 freepte: 39590
pi: 1.94/s po: 2.00/s
--IOstat-----
Dk Signatur Read(B) Write(B) Read(t) Write(t) Idle(t) R(c) W(c) Q S
 0 35CB34EC 5,820,416 4,212,224 668.09 689.01 2242.93 1252
1000 0 0 3,600,046,875
 1 CE2EE96C 22,791,680 41,038,336 2030.01 1318.03 251.99 5136
1425 0 0 3,600,046,875
 2 CE1F98E1 729,088 13,025,280 94.90 13541.68 0.00 89
887 0 0 13,636,597,615
                   0 552,960 0.00 12.07 3587.97 0
 3 CE2EE96D
```

9 0 0 3,600,046,875

FSstat MountPoint VolNum	PhysDrv			B) Tota	 al(KB) %fi	ree
C:\pagefile.sys		PagingFile	1	20	2,048 5.8	86%
D:\pagefile.sys		PagingFile	2,375,1	16 3,0	72,000 77.3	31%
B5D97AOC 3000 H:\pagefile.sys		PagingFile	1,7	44 18	84,320 0.9	95%
00D37BF0 180 C:\	0	NTFS	1,099,0	01 4,19	92,492 26.2	21%
B8BA90A3 0 D:\	1	NTFS	112,9	40 12,12	29,484 0.9	93%
6470EC21 0 E:\	2	NTFS	3,027,7	68 35,5	40,408 8.5	52%
E8E20702 0 F:\	3	NTFS	559,9	72 1,19	98,060 46.	74%
A891FC02 0 H:\ 5CDA4CC9 0	0	NTFS	21,3	14 20	08,025 10.2	25%
Network T S MTU		o/s TX-Kb/s R				
24 1 1500 100	- 000000	0 0			ack interfac	се
[None] 3,600,000		0 0		_	mily Etherne	
Adapter [0004AC4						
TopTenInterval:						
ActiveCPUs:	3,600,000,0 2	700 (us)				
TotalProcesses: TotalThreads:						
TotalIO:	0					
TotalHandles:						
CPU absolute	PID	User	Sys Thrds	Hlds		
Idle		0 6,803	, 672 2	. 0		
disp+work sglservr		22,422 11 71,547 11	,797 4 ,563 43			
disp+work	299 2	28,875 2	,875 4			
disp+work disp+work	397 323	6,297 6,422	938 4 797 4			
System	2		,719 35			
perfwcol	179		,313 2			
disp+work inetinfo		5,078 2,609 2	344 4 ,391 21			
CPU group						
Idle	User 0	Sys T. 6,803,672	hrds Hlds 2 (
disp+work	276,845	17,656	82 3436			
sqlservr	71,547	11,563	43 967	•		
System	0	6,719	35 1033			
perfwcol inetinfo	1,172 2,609	4,313 2,391	2 71 21 342			
sqlagent	422	63	8 93			
aqrayenc	422	0.5	0 9.	,		

	saposcol SERVICES msdtc	157 47 16	141 203 47	4 20 21	77 289 110
MEM	sqlservr disp+work disp+work disp+work disp+work disp+work mmc disp+work disp+work disp+work	PID Private 153 822,194,176 397 59,260,928 267 24,383,488 323 14,864,384 259 11,591,680 330 11,104,256 172 9,797,632 254 7,954,432 296 7,778,304 362 7,098,368		0 0 0 0 0 0 0 0 0	
MEM	disp+work mmc sqlagent gwrd perfwcol msg_server SERVICES	822,194,176 180,441,088 9,797,632 2,252,800 1,748,992 1,654,784 1,581,056	0 0 0 0 0 0 0 0 0		
IO	absolute	PID IO			
IO	group	IO			

Attorney's Docket No.: 12971-002001

APPLICATION

FOR

UNITED STATES LETTERS PATENT

For

Remote Remonitoring

Appendix B

CERTIFICATE OF MAILING BY EXPRESS MAIL

Express Mail Label No. EL298426691US
I hereby certify under 37 CFR §1.10 that this correspondence is bein deposited with the United States Postal Service as Express Mail Pooffice to Addressee with sufficient postage on the date indicated belo and is addressed to the Commissioner for Patents, Washingto D.C. 20231. May 11, 2001
Date of Deposit
Samartha Bell
Signature
Sayantha Bell
Typed or Printed Name of Person Signing Certificate





Performance Analysis ACMECORP

Introduction

Summary

Concepts

Availability

CPU Usage

Process Queue

Memory

Network I/O

Disk I/O

Paging Space

File System

Top 10

Introduction

Based on data collated in the host ACMECORP, from 01/01/2001, at 01:00, to 10/01/2001, at 00:00, the current performance analysis report was elaborated.

The data used on this report has been obtained from an exclusive collector, with high resolution and low intrusion, developed specially for this end, which executes on the target machine. That collector obtains data directly from the operating system, without any other libraries or additional tools, with a minimum overhead on the system. The data collected is stored using a binary format, in order to provide persistence. When automatically sent, it gets compressed and encrypted, to ensure fast delivery and confidentiality.

The content of this report is based on years of experience on performance analysis and capacity planning. The tool used to generate this report operates in a completely automatic way, without human direct intervention. It uses an extensible inference machine, based on heuristics and rules, improved continuously. Using concepts such as "watermarks" and tolerance, it is possible to determine if a computational resource usage is excessive and if the excess is relevant.

During the monitoring period, the summary of the machine, which has been obtained dynamically, was:



OS: AIX 4.3.3.16

Host: ACMECORP IP address: 192.168.1.15

Processors: 2 PowerPC_POWER3

Memory: 1024 MB

Model: IBM,9076-260 Serial: IBM,010003297 The last boot of the host ACMECORP took place on 27/12/2000, at 21:45.

This report is based on monitoring which occurred place between 01/01/2001, at 01:00, and 10/01/2001, at 00:00. The following was worth highlighting within this period:

CPU usage did not show a problem with its maximum usage not exceeding 13%.

The percentage of time the CPU spent waiting for an I/O occurrence remained below the limit of 40% during the whole monitoring period, which indicates that this system is not I/O bound.

The runnable processes queue was not a problem, with its maximum level never exceeding the number of active processors.

The blocked processes queue (awaiting input/output) remained above the level of 1 process(es), as shown in the graph below, thus resulting in a tight bottleneck in the system.

The average paging rate remained low for the whole monitoring period, reaching at most 1.2 pps, indicating that there had been no memory constraint.

All of the real memory was allocated during the monitoring period for processes and file caching .

The amount of virtual memory in use remained low throughout the monitoring period, indicating a low demand for memory by processes.

The transmission rate of the network interface lo0 remained above 45% of the interface capacity, all the time, indicating, therefore, a high level of overload.

The reception rate of the network interface lo0 remained above 45% for most of the time, when the interface was overloaded.

The transmission and reception rates of the network interface css0 remained above 45% of the interface capacity, all the time, indicating, therefore, a high level of overload.

The disk hdisk2 exceeded the limit of usage, for more than 10% of the monitoring period.

The paging space was not a problem, with the usage not having exceeded 6.5%.

In order to be able to understand a performance analysis report, it may be convenient to review some basic concepts. The idea here is not to make a treaty on the subject, but to go through some fundamental aspects related to performance.

System performance means different things to different people. This can range from resource consumption to amount of work performed per unit of time. It will be assumed here that improving performance means improving response time of end users and/or increasing throughput of both end user work and batch work.

The performance of any system depends on how tied up key resources are. The reason being that system performance is, essentially, a function of the time each key resource takes to service a request, plus the time a request has spent queued waiting to be serviced (more details on queues ahead). In case of an information-processing environment, based on computers, key resources are CPU, memory, disk I/O and network I/O.

In order to evaluate resource consumption, criteria must be established. These criteria consist of judging which system performance variables best express this consumption, since many are available. In addition, the watermarks (point where a resource starts to be considered overcommited - also known as thresholds) for these variables need be defined. These watermarks are approximate and can vary depending on the characteristics of the system being analyzed.

Description of key resources

1 - CPU

CPU's can play a significant role in the response time of computational environments, especially when other resources are abundant. This is particularly true in environments where most of the data required is available in memory. For CPU, the key variables to evaluate resource consumption are run-queue and CPU usage.

1.1 - Run-queue

Run-queue means the amount of processes (threads, in fact) which are runnable (ready to execute), being either queued, waiting for a CPU, or already executing. It is a measure of how used up is the CPU, in an environment comprised of many processes (a commercial transaction environment, p.e.). The watermarks, typical of run-queue, are a range between the number of processors available and five times this value. This depends on the response time required for a transaction, versus the amount of CPU required by this transaction.

1.2 - CPU Usage

CPU usage is a measure of how used up is the CPU in an environment

comprised of few heavy processes (such is the case of scientific or commercial environments with few, but complex, batches). It can be used as a criterion for environments with many processes, but run-queue is more meaningful in these cases. CPU usage is expressed in percentage and it can be broken in four categories, usr, sys, idle and wio. Usr stands for user mode or the mode in which a process executes, when not using any operating system service. Sys means system mode, which is the mode a process is placed into when using any operating system service. Idle, as the term suggests, is when a CPU has no process to execute. Wio stands for waiting for I/O, a special case of idleness, where the CPU is available, but there are processes waiting for an I/O operation to complete. CPU usage is normally a concern when usr+sys is above 75 to 85%, in an environment with multiple processes, or is close to 100% / number of processors, in an environment with few processes.

2 - Memory

Memory can play different roles in a computational environment, ranging from fast storage area for program data to disk data caching (making up for the slower speed of disk subsystems). This means that memory is consumed for very distinct purposes. Memory consumption, being understood as not only real memory (RAM), but as the entire virtual memory subsystem, can be well evaluated by paging activity, virtual memory usage and paging space usage.

Paging activity occurs when the real memory being managed by a virtual memory subsystem is overcommitted. In a small degree, it is not a problem, since the main purpose of the virtual memory subsystem is to be able to maximize system throughput by allowing process memory to be swapped in and out. It becomes a critical issue when paging reaches high rates. The point is that paging indicates that the sum of the working sets (ranges of virtual memory addresses of processes that need to be accessible at a given moment) of the processes, plus what is left aside for the operating system and file caching, exceeds the amount of real memory available. Paging is broken down in page in (pi) and page out (po). A page in is usually regarded as more serious, since it may indicate a thrashing condition (the system is spending too much time just paging). The watermark for paging (pi+po) is in the range of 10 pages per second.

Paging space usage is a fundamental concern when analyzing the state of the virtual memory manager. If no paging space is available, definitely no new process will be spawned and, very likely, some existing processes may be terminated by the operating system in order to make room in the paging space. So, real memory constraints impact performance, but paging space constraints put in risk the entire execution environment. The amount of virtual memory devoted to process segments (process data area) is directly related to paging space usage, if the operating system in question is working with early paging

space allocation (allocate space in the paging area whenever it is allocated in real memory). In this case, the amount of space being used in the paging area is the sum of the data areas of all running processes, which is the major component in determining the amount of real memory required by the system. If the amount of virtual memory in use exceeds the amount of real memory available, paging will very likely occur, initiating peformance degradation. In an environment experiencing significant growth rates, especially in terms of users, it is advisable to keep the average paging space usage rate at 50%. Obviously, this concern does not exist or is less serious in the case of operating systems that are able to allocate paging space dynamically.

3 - Disk I/O

Disk I/O is certainly one of the main subjects when performance is in discussion. This is particularly true in commercial environments. Disks, being mechanical devices (in comparison with other devices which are faster, because they are eletronic) can, if not properly used, put in jeopardy the performance of an entire system. In addition, disks can present two very distinct personalities - one, when accessing data in random mode (slower, because it involves arm movement), and other, when accessing data in sequential mode (faster, because it only involves plate movement). Also, the performance of disks varies according to the blocking factor (amount of data involved in a same operation), since the impact of the overhead is dilluted, in the case of large blocks. Therefore, disks must be closely watched. Among the key variables that provide information on disk I/O usage are bandwidth occupation, transfers (I/Os) per second, transfer rate (usually expressed in KB/s) and physical read to write ratio.

3.1 - Bandwidth occupation

Bandwidth occupation is probably the most important variable when evaluating disk I/O. It is calculated based on the number of samples taken within a period (1 second, p.e.) that found a given disk to be busy. It is highly dependent on the rate of requests being sent to the disks and the type of data access being required by these requests (since random requests take longer to be serviced than sequential requests). With bandwidth occupation, it is possible to estimate whether disk I/O requests for a given disk are spending time in queues, instead of being serviced promptly. The disk bandwidth occupation watermarks regarded as acceptable vary from 15%, for environments with predominantly random access (OLTP with simple transactions), to 65%, for environments with predominantly sequential access (datawarehouse, complex batch applications, etc.). A criterion of 40% is adequate for mixed environments (which constitute the great majority of the cases).

3.2 - Transfers per second

Transfers per second provide a good complementary information to

bandwidth occupation, specially in order to evaluate more subtle bottlenecks such as disk adapters (SCSI, FC-AL, SSA, etc.). Disks adapters have a ceiling, in terms of transfers per second, that might be reached without notice, limiting, therefore, the I/O capability of multiple disks. Physical disks support about 100 to 120 transfers per second, when accessing data in random mode, and 10x these values or more, when accessing data in sequential mode. So, it is considered acceptable to keep disks operating at a sustained rate of about 50% of these values.

3.3 - Transfer rate

Transfer rate informs the amount of data that is being received from disks or being sent to disks, per unit of time. Like bandwidth occupation and transfers per second, transfer rate is a function of the rate of requests being sent to the disks and the type of access being required by these requests (random access requires more time to be serviced and, therefore, limits transfer rates). Another key aspect of transfer rate is that it may also expose the ceiling of disk adapters, regarding this characteristic. In addition, computer I/O buses may also impose a limit on the transfer rates of adapters inserted in these buses. The typical watermarks for transfer rates, per individual physical disk, varies from 400 to 1.000 KB/s, for random I/O, to between 4.000 KB/s and 25.000 KB/s (when using large blocks), for sequential I/O.

3.4 - Physical read to write ratio

The physical read to write ratio for disk I/O is important in determining whether a given database configuration is adequate and whether the type of disk layout being used is the most suitable. When the number of physical reads more than exceeds 5x the number of writes, it might mean (although not necessarily) that the size of a database buffer cache is not big enough. Therefore, the database software might be operating with an unacceptable hit ratio (ratio of logical reads that are satisfied by the cache). A physical read to write ratio below 2.5x, although not a problem in itself, might not be adequate for certain disk layouts such as RAID-5, since this arrangement has a significant write-penalty (additional effort required to perform write operations, when compared to read operations).

4 - Network I/O

Network I/O, although also a key resource, seldomly plays a major role in influencing response time, except when wide area networks (WAN's) are involved. Nevertheless, this resource must also be monitored, for it may hide some surprises. The key variables to evaluate network I/O are transfer rate (or, bandwidth occupation of the maximum transfer rate), error rate and latency.

4.1 - Transfer rate

Concepts

Similar to disk I/O, the transfer rate of network adapters depends on block size, although the impact is not as significant. On the other hand, there is direct correlation between transfer rate and bandwidth usage in the case of network I/O, whereas with disk I/O this is not the case (since the data access mode must be considered). Typically, collision-prone networks (Ethernet, without switches, p.e.) should operate at 30 to 40% of their nominal capacity and other types of networks should be kept at 50 to 70% of their nominal capacity.

4.2 - Error rate

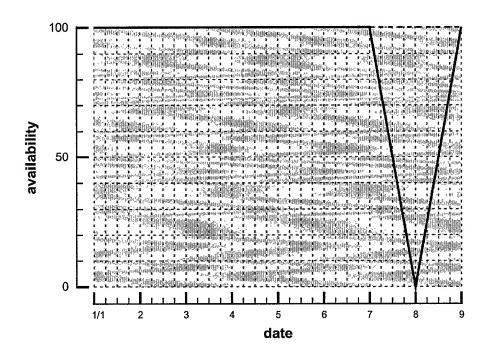
Error rate provides a measure of how effective the transfer rate is in a network, since a high error rate will mean that the effetive transfer rate is very low. Most network adapters and network device drivers provide some means of retrieving error information, which is presented as a complementary statistic to the transfer rate itself. Major causes of high error rates in LANs are collisions (two or more network devices trying to send data at the same time), stationary waves (signal that remains in the network due to poor termination), full-duplex/half-duplex mismatch (operation mode mismatch between adapters and hubs/swiches) and speed mismatch (speed mismatch between adapters and hubs/switches). A major cause of high error rates in WANs is noise (heat, electromagnetic noise, etc.). The watermark for error rate in LANs should be of 1% or even less and for WANs should be of about 5%.

4.3 - Network latency

Network latency can be measured by various schemes, the most common being echo requests (TCP/IP ping, p.e.). It is a measure of how long the first packet, of a chain of packets, took to reach its destination. The point is that it is not enough to have high bandwidth if the first packet requires a very significant time to arrive. This is the case with satellite links, but may also apply to confined networks. For instance, the latency of ATM and gigabit Ethernet can be very small for conventional applications, but it is high for parallel computing applications. Another aspect of latency is that it may have an important software component, such as the one caused by operating systems protocol stacks (communication subsystems). The typical latencies desired for corporate LAN's (Local Area Networks) are in the range of 1 to 10 ms.

Availability

During this analysis monitoring period the machine mantained the following availability rate.

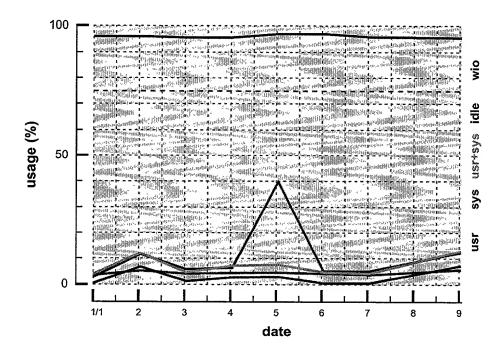


CPU Usage



CPU usage was not a problem, as shown in the graph below, with its average usage not exceeding 75%.

The percentage of time the CPU spent waiting for an I/O occurrence remained below the level of 40% during the whole monitoring period.



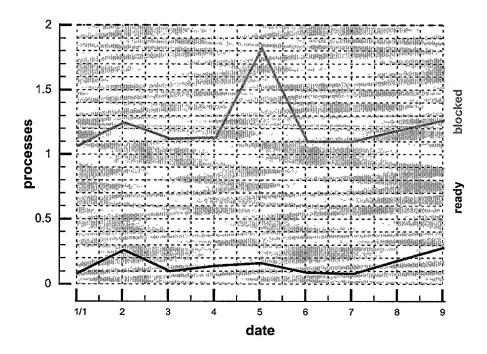
Process Queue



The runnable processes queue was not a problem, as shown in the graph below, never exceeding 2 process(es).

The blocked processes queue (awaiting input/output) remained above the level of 1 process(es), as shown in the graph below, thus resulting in a tight bottleneck in the system.

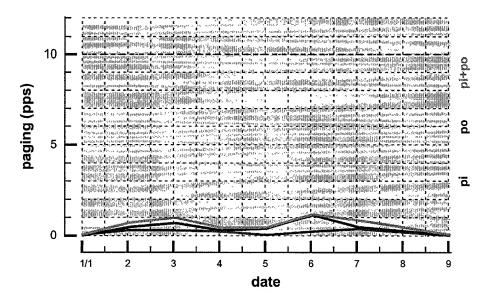
The greatest number of processes and threads running occured on 05/01, at 00:00, whith 157 processes and 195 threads.



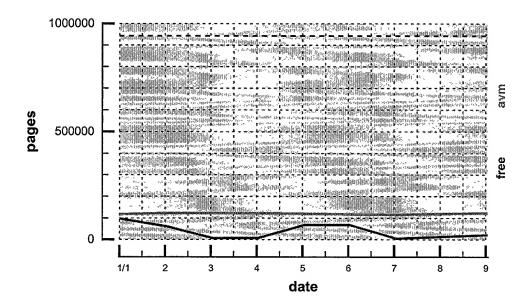
Memory



The average paging rate remained below the recommended level during the whole monitoring period, indicating the absence of memory constraints.



The amount of virtual memory in use remained low throughout the monitoring period.



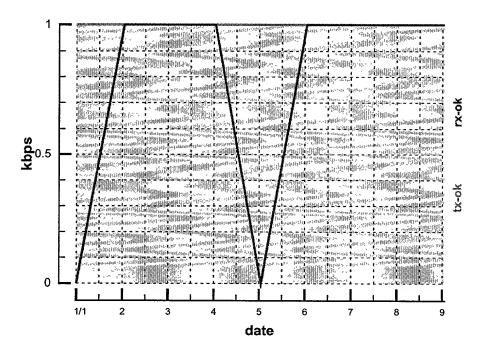
All of the real memory was allocated during the monitoring period for processes and file caching.

Network I/O Interface Io0



The transmission rate remained above 40% of the interface capacity, for the whole time, indicating, therefore, a heavy overload.

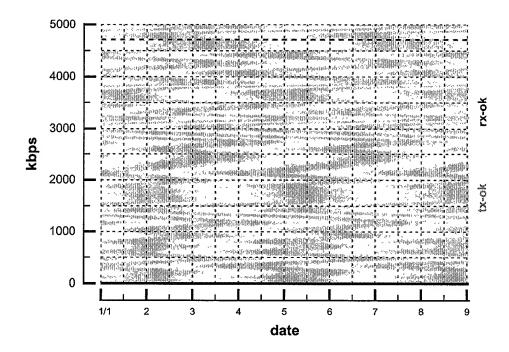
The reception rate remained above 40% for most of the time, when the interface was overloaded.



Network I/O Interface en0



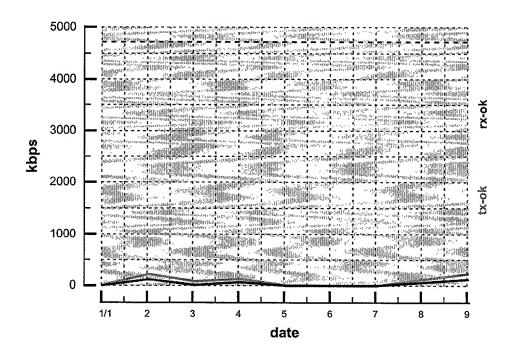
The transmission and reception rates remained below 40% of the interface capacity, for the whole time, without, therefore, having an overload.



Network I/O Interface en1

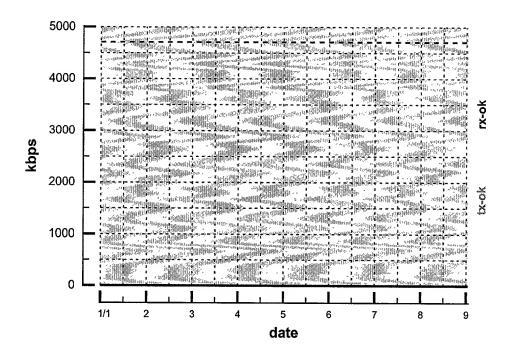


The transmission and reception rates remained below 40% of the interface capacity, for the whole time, without, therefore, having an overload.





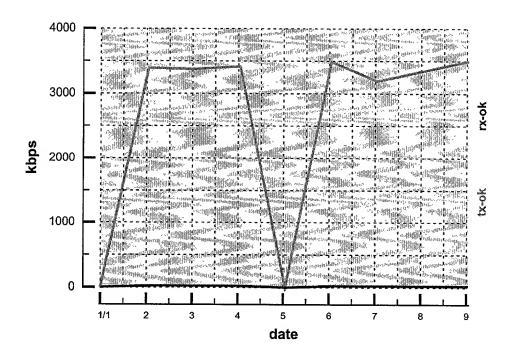
The transmission and reception rates remained below 40% of the interface capacity, for the whole time, without, therefore, having an overload.





Network I/O

The transmission and reception rates remained above 40% of the interface capacity, for the whole time, indicating, therefore, a heavy overload.



Disk I/O



The 4 disks were analyzed for the following requisites: transaction rate, transfer rate and usage.

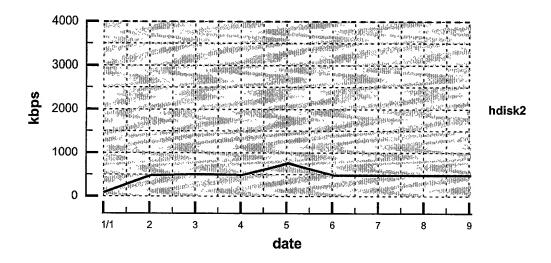
The disk hdisk2 exceeded the limit of tps, for more than 10% of the monitoring period.

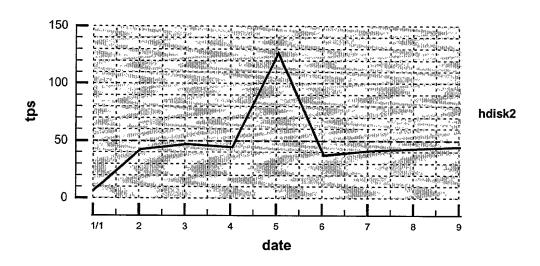
The disk hdisk2 exceeded the limit of usage, for more than 10% of the monitoring period.

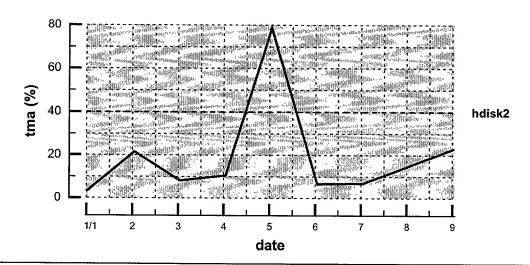
The other disks showed good results, without exceeding the limits of each of the requisites.

The graphs relating to disk hdisk2 are shown on the following pages.

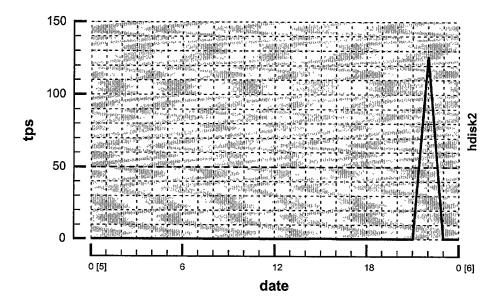
Disk I/O

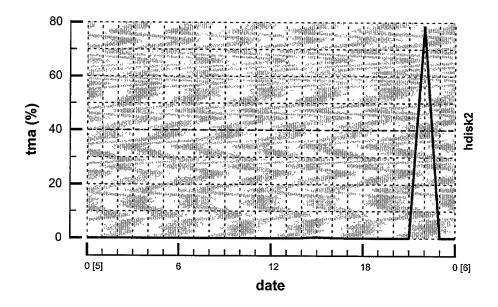






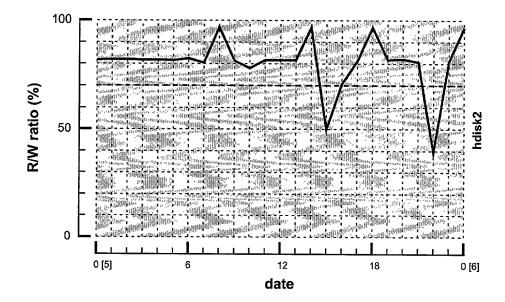
On the 05/01, at 01:00, the disk I/O showed the highest activity during the whole monitoring period. The graph below represents the status on this day.





Disk I/O Zoom

The graph below shows the disk hdisk2 Read/Write ratio, during the highest I/O activity period.



I/O Activity

Status of 10 processes with the most I/O activity on the 05/01, at 01:00. At that time there was 1020 open files.

ABSOLUTE

PROCESS	* ,3	PID	FILES	USAGE
nim_hps	1,0	22478	``````````````````````````````````````	
vmstat		51140	,	28%
init	۶.	\$ 1 1,1	* (a) (b)	7%
dtlogin		4408	·**: , , · · · · · · · · · · · · · · · · ·	5%
clstrmgr		21472	10	2%
perfwcol		42404	· ** 0	1%
nim_ether		20282	0	1%
· i4llmd		12672		· · · 0%
dm_ep_engine		18874	, , , , , , , , , , , , , , , , , , ,	0%
dsmmonitord	,	7746	0	0%

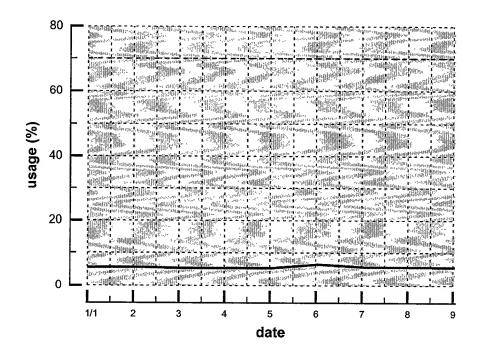
GROUP

PROCESS	FILES"	USAGE
_nim_hps	0,	49%
vmstat		28%
init (). The distriction of the control of the cont		7%
dtlogin		5%
clstrmgr	O	2%
perfwcol	·	1%
nim_ether of the control of the cont		1%
i4limd, American March	0,	0%
dm_ep_engine	0	. 70%
dsmmonitord	0	

Paging Space



The paging space (1572864 pages) was not a problem, as shown in the graph below, with the usage not exceeding 6.5%.



File System

Status of the file system at the end of the monitoring period:

FileSystem	Mounted	Total	Free	%Used
/dev/hd4	1	32768	5232	84
/dev/hd2	/usr	1474560	264168	82
/dev/hd9var	/var	131072	30916	76
/dev/hd3	/tmp	131072	126776	3
/dev/hd1	/home	32768	31576	3
/dev/lv01	/backup	32768	26360	19
/dev/lv02	/temp	229376	74068	67
/dev/lv03	/usr/local	32768	28764	12
/dev/lvimage	/image	2621440	2538212	3
/dev/hdwlv001	/var/opt/perf	4587520	4318872	5
/dev/hdwlv002	/usr/lpp/perf	32768	8580	73
/dev/utilv000	/util	32768	31668	3
/dev/lv04	/DENYALL	524288	384328	26
/dev/im1p01homlv002	/home/cltadmin	4096	3904	4
/dev/im1p01homlv003	/home/db2fenc1	4096	3920	4
/dev/im1p01db2dv101	/home/db2inst1	1843200	249700	86
/dev/im1p01homlv001	/home/lsadmin	65536	60968	6
/dev/im1p01tivlv001	/opt/tivim1p1	12288	4436	63
/dev/audlv001	/opt/audim1p1	196608	190356	3
Paging space		1572864	1484584	5

Processes that most used CPU during the monitoring period, as from 01/01.

ABSOLUTE

PROCESS	PID	THREADS	USAGE
i'await	516	° '3.1'	48%
wait,	774	″″₅″ 1 ∰	48%
syncd	5466	. 1	1%
hatsd 🥕 👙	16514	·"(" :_10 ¹	.0%
.gil ,	1548	, 5	· 0%
dtlogin .	4408	(() () () () ()	. 3 % .0%
nim_ether	20282	, [^] ° , , 1 °	0%
nim_hps	22478	j. 1 .	0%
swapper	. 0	. Se . 21	0%
i4llmd	12916	1.".	0%

PROCESS	THREADS	USAGE
wait	2	97%
s syncd	1	1%
hatsd	1,0	0%
gil	[] 5 ·	0%
dtlogin		0%
nim_ether and an arrangement of the second	2	33. 0%
nim_hps	1	
swapper		13. 0% ·
i4llmd	2.	0%
clstrmgr	3 31	0%

PROCESS	PID	THREADS	USAGE
̂ wajt	516	***** ** 1 **	46%
wait	774	11,	46%
syncd	5466	· , · , · , ., ,	1%
db2sysc	26972	. 1.	0%
gil	1548	5	· 0% +
hatsd	16514	⁵ 10 ⁵	.0%
<u>dtlogin</u>	4408	·	***************************************
frnxlich	53246	, 1,	0%
frnxllch	52406	1 33.5 1	*************
frnxlich	21976	,	0%

PROCESS	°c,t	* * *	THREADS	USAGE
wait 🦙 📜	0 7			93%
db2sysc	, vel *		35	1%
້syncdູ້ ເມື	, (" \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	. e. 1%,
frnxllch		4.	20	1%
frnxliis	, ,	2.	22	0%
gil , ,			, ø, 5	0%
hatsd			10 %	0%
dtlogin	ş x	, , ,	, , , , , ; <u>1</u>	0%
nim_ether	,		2."	0%
dsmc				, · . · · 0% ^{**}

PROCESS	° '⊶PID	THREADS	USAGE
wait	516	10 11	48%
j wait	774	(),(1)	47%
syncd	5466	1. A.	2%
hatsd	16514	10	0%
" gil	· 1548	5	0%
dtlogin	4408	197 19	0%
nim_ether	20282	13 july 1	0%
dsmc	47178	,, · . · . 8 · ·	3 0%,
nim_hps	22478	in the second of	
swapper	, , , , , 0	(*) 1 ^;	0%

PROCESS		THREADS	USAGE
wait	and the second	(m. m.) 2	96%
syncd		```\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2%
hatsd		``″ _{.∾€} 10 ๋.₃	
gil		55:	0%,
dtlogin			0%
nim_ether		· * * 2	0%:
frnxllch		.20	0%
db2sysc	The same of the sa	35	5.0%
dsmc		8.0	0%;
nim_hps		1	0%

PROCESS	3.5	PID.	THREADS	USAGE
°wait .	7 K	516	1	48%
wait)	774	1.,,	47%
syncd		5466		2%
hatsd:	*, *	16514	.+ 3% 110 *;	0%.,
gil	3 547 448	1548	5	0%
°dtlogin	۶ و 45 <u>5</u> ر	4408	. 1	0%
nim_ether -		20282	1s	0%
dsmc	. , 💉	47178	, · · · · 11	. 0%
"´nim_hps		22478	1. 5.2 O. 1.	0%
i4llmd	,	12916	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0%

PROCESS	and the second second	THREADS	USAGE
wait	The said	· · · · · · · · · · · · · · · · · · ·	96%
syncd	The state of the s	and the second steel	
frnxllch		^^ ^ <u>}</u> 20	
db2sysc		35	0%
hatsd		10	to^; 0 % ,
gil	Service Services	5 (,
dtlogin	* >	î.,, 1 3	
nim_ether	es des	<u> </u>	0%
dsmc	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11	. 0%
frnxliis		· 22 ″	0%

, PROCESS , A COLOR	" PJD.	THREADS	USAGE
wait j j j j j j	516	1	48%
wait	774	. 1	48%
syncd	5466	. 1.	1%
db2sysc	49562		0%
hatsd 😘 🛒 🎨 📆	16514	10	0%
gil	1548	5	0%
្dtlogin ំក្នុង និក និក្ស	4408	" 1	0%
nim_ether	20282	** [*] , , 1	0%
db2sysc	35374	of 4, 1 ,	0%
db2sysc ,	14932	1.	0%

PROCESS	THREADS	USAGE
wait was see the see t	2.	96%
syncd	5 5.1 .1	1%
db2sysc	35	0%
hatsd: *** *** ****************************	i 10 -	
gil	5,	0%
dtlogin	1 1 1	0%
nim_ether	ૺ ૣ૽૽ૺૢ૾૾૽ૼ૱ 2 ૺ૿	0%
inim_hips in the second of the	1.	0%
swapper		0%
j4llmd	2.	0%

PROCESS	PÍD	THREADS	USAGE "
wait 🤲 🛒	516	1 1	.48%
wait	774	1	48%
syncd	5466	³_1;	1%
gil', '`., '` ',	1548	5	0%
hatsd : ::::	16514	10.	0%
dtlogin	4408	1.	0%
, dsmc.	47178	· · · · 5 ,	0%
nim_éther	20282	3 . 1 0	, ° 0% '
nim_hps	22478	. (0%
i4llmd	12916	* 1,	o%

PROCESS	THREADS USAGE
wait	2 97%
sýncd a state of the state of t	1,86
Egil Standard	5.
hatsd the control of	10. 20%
" dtlogin	1
nim_ether.	2 0%
asmc	5 0%
nim_hps	
i <u>i</u> llmd	2 0%.,
_lrud	201 July 10%

PROCESS " " " " " " " " " " " " " " " " " "	PID	THREADS	USAGE
wait - , , , , , , , , , , , , , , , , , ,	516	`` , 1'	24%
wait ()	774	, ¹ 1,	23%
syncd A	5466	1	1%
hatsd	. 16514	10	0%
gil	1548	. 5.	0%
dtlogin	4408	1 '	0%
nim_ether	20282	1	.0%
dsmc	47178	. 8	. 0%.
nim_hps	22478	1.	0%
clstrmgr	21472	· 1	0%

PROCESS	THREADS	USAGE
wait wait	2 ,	48%
alsynch and the second and the secon	1	5 (\$\frac{1}{2}1
hatsd hatsd	10	0%
gil and a second		0%
dtlogin	1	-0%
nim_ether Age of the second	2	0%
dsmc v v v v v v v v v v v v v v v v v v v	.h. [8	0%
inim_hps	(, , 1	0%
clstrmgr	·	0%
"i4llmd " ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	2	0%

PROCESS		'-, PIĎ	THREADS	USAGE
wait	18.	516	1,4,1,1	48%
wait	, , ,	. 774		47%
syncd		5466		2%
db2sysc		33452	* 1 :	0%
gil	, , , ,	1548	. 1 5c	0%
`hatsd	,	16514	(, ; ^(%) 10,	0%
frnxllch	4 242	. 29344	::: 1 '	0%
frnxllch		53968	, , <u>,</u> , ,1,	0%
frnxllch		35966	`. ; [:] \ , 1,	0%
frnxllch	, , ,	30956	`.'·*", ¶	0%

PROCESS	THREADS	USAGE
wait	,	95%
db2sysc		2%
syncd	1,5	2%
frnxllch, s	20	1%
frnxliis		0%
gil	55	0%
hatsd	10	0%
nim_ether	2	0%
dtlögin	" · · · · · 1	. 0%
nim_hps		. 0%

Processes that most used memory during the monitoring period, as from 01/01. The usage is showed as KB.

PROCESS	PID	THREADS	USAGE
hatsd'	16514	. 10	6
dsmc	47178	14	6
nhagsd 1911 1911	17030	1	4
db2sysc	42856	· 1	3
db2sysc 1	44638	1 ,	»
náemd námená	15996	. 1	. 3
harmad 🏥 🔭	15744	· . 1 1	2
db2sysc	38968	1	2
XS San San San San San San San San San Sa	20760	, 1.	
X	54000	1	. 2

PROCESS (27) 50 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PID	THREADS	USAGE
hatsd San Control	16514	10	6
dsmc , · , · , · · · , · · · · · · · · · ·	47178	, ∵5	6 .
hagsd	17030	1	4 .
db2sysc j	44638	, 1	. 3
hạemă 🛒 👫 👾 🔍 🏃 🎉	15996	1	3
harmad	15744	<u>,</u> 1	2,
db2sysc ·	38968	· * ;	2.
i4llmd i	12916	· 1	1°.3
. j4llmd 👵 🤭 📜 🏋	12672	1	. 1
dsmrecalid	6216	1	177

PROCESS	PID	THREADS	USAGE
dsmc	47178	. *	6
hatsd	16514	كەتىڭ ئ <mark>رۇن</mark> ئالا	6
hagsd	17030	(*	,4
haemd	15996		3
harmad	15744	°′	2
i4llmd	12916	, 1 [']	1
i4llmd	12672	: '`_ '	1
dsmrecalld	6216	14. (A. 1)	1
fault_service_Worm_RTG_SP	11374	‱, ′≤, ₀ , 1, ′	<u>, </u>
dsmmonitord	7746	1	.1

PROCESS "	PID	THREADS	USAGE
dsmc	47178	1,11;	6.
hatsd	16514	10.	. 6
hagsd	17030	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	~ 4
haemd	15996	, 4 1	3
harmad	15744	, 1'	
db2sysc	35126	1.	2:
14llmd	12916	'i, 16	<u>}</u> 3 1
∍i4llmd [™]	12672	2. Jan 24.	(*) } 1
dsmrecalld	6216	(A)	1.
db2sysc	45062	1.	1 1 1

PROCESS	PID	THREADS	USAGE
dsmc	47178	, 14·;	6
hatsd	16514	10°	6
hagsd	17030	. "1:	4
haĕmd 🖟 🎋 🚛 🗀	15996	1	
db2sysc	35374	<u>,</u> 1 ²	``.\\\ 3
harmad.	15744	∴1	2
db2sysc	13418	' , 1 ,	·
db2sysc	45062	1	
⊸db2sysc [®]	35126	1	35. 1.2
db2sysc	14932	1	2

PROCESS 1	PID	THREADS	USAGE
dsmc satta	47178	,라이 5	. 1 6
hatsd	16514	. 10	. 6
hagsd	17030	1	4
db2sysc	35374	, 1	
haemd	15996	1	`.''``
harmad 🛴 🔻 💥 📉	15744	· 1	2
db2sysc ()	14932	1,	2
db2sysc	49562	, , 1	, , 2 ', [‡]
`db2sysc ^{?s o}	45062	. 1	· · · · 2 5
db2sysc	35126	1	2

PROCESS	ere and the second	PID	THREADS	USAGE
dsmc	and the same	47178	S. 12 8	. 6
hatsd		16514	ैं- [*] ं; 10ं∗	6
hagsd	0	17030	`,': _, 1	4
haemd		15996	, " ['] 1	3
harmad		15744	. 1	2
db2sysc	4	45062	· '** , '* , 1	2
db2sysc	2 2 2 2 2	35126		2
i4llmd (AS CAL	12916	,``.^; 1	1
į4llmd	and the second second	12672	·., · · · · · 1	. 1
dsmrecalld		6216	1.	΄ 1

PROCESS	PID	THREADS	USAGE
hatsd	16514	10∞	·. 6
dśmc	47178	· · · 14.0	6
hagsd	,17030	1,	, 4
haemd	15996	: do 5 1 °	· · · · 3
harmad	15744	"au, se " 1 "	· ' 2'
db2sysc	45062	. 1	2
db2sysc	, 35126		, , «',
i4llmd	12916	· 1	1
i4llmd`	12672	. 1	` 1
dtlogin	4408	. 1	1